

NOTICES OF FINAL RULEMAKING

The Administrative Procedure Act requires the publication of the final rules of the state's agencies. Final rules are those which have appeared in the *Register* 1st as proposed rules and have been through the formal rulemaking process including approval by the Governor's Regulatory Review Council. The Secretary of State shall publish the notice along with the Preamble and the full text in the next available issue of the *Arizona Administrative Register* after the final rules have been submitted for filing and publication.

NOTICE OF FINAL RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 12. DEPARTMENT OF ENVIRONMENTAL QUALITY

UNDERGROUND STORAGE TANKS

PREAMBLE

<u>1. Sections Affected</u>	<u>Rulemaking Action</u>
R18-12-101	Amend
R18-12-102	Amend
R18-12-103	Repeal
Article 2	New Article
R18-12-210	New Section
R18-12-211	New Section
R18-12-220	New Section
R18-12-221	New Section
R18-12-222	New Section
R18-12-230	New Section
R18-12-231	New Section
R18-12-232	New Section
R18-12-233	New Section
R18-12-234	New Section
R18-12-240	New Section
R18-12-241	New Section
R18-12-242	New Section
R18-12-243	New Section
R18-12-244	New Section
R18-12-245	New Section
R18-12-270	New Section
R18-12-271	New Section
R18-12-272	New Section
R18-12-273	New Section
R18-12-274	New Section
R18-12-280	New Section
R18-12-281	New Section
R18-12-300	Amend
R18-12-301	Amend
R18-12-303	Amend
R18-12-305	Amend
R18-12-306	Amend
R18-12-307	Amend
R18-12-308	Amend
R18-12-309	Amend
R18-12-310	New Section
R18-12-311	New Section
R18-12-312	Amend
R18-12-313	Amend
R18-12-314	Amend
R18-12-315	Amend
R18-12-316	Amend
R18-12-317	New Section
R18-12-318	Amend
R18-12-319	Amend
R18-12-320	Amend

Notices of Final Rulemaking

R18-12-321	Repeal
R18-12-322	New Section
R18-12-323	New Section
R18-12-324	New Section
R18-12-325	New Section
R18-12-401	Repeal

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 49-1003 and 49-104

Implementing statutes: A.R.S. §§ 49-1001, 49-1001.0, 49-1002, 49-1003, 49-1006, 49-1008, 49-1009, 49-1010, 49-1011, 49-1014, 49-1016, and 49-1021.

3. The effective date of the rules:

July 30, 1996.

4. A list of all previous notices appearing in the Register addressing the final rule:

Notice of Rulemaking Docket Opening:

1 A.A.R. 896, June 30, 1996

Notice of Proposed Rulemaking:

2 A.A.R. 906, February 9, 1996

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Michael L. Denby or Martha L. Seaman

Address: Department of Environmental Quality
3033 North Central Avenue
Phoenix, Arizona 85012

Telephone: (602) 207-2222

Fax: (602) 207-2218

TTD: (602) 207-4829

6. An explanation of the rule, including the agency's reasons for initiating the rule:

The adopted rules will continue the establishment of a comprehensive regulatory program for owners and operators of underground storage tank systems, to be administered by the Department of Environmental Quality (hereafter "the Department"), which meets the legislative requirements of the A.R.S. Title 49, Chapter 6. This adopted rule will amend and consolidate the definition Sections, establish underground storage tank preventive requirements, and amend the financial responsibility rules for owners and operators of an underground storage tank system.

Article 1 is revised to accomplish a 2-fold purpose. First, the adopted revisions now provide 1 location where all of the definitions of terms used in the UST regulatory program may be found (R18-12-101). The adopted revisions to the definition Section include the addition, amending, and supplementation of numerous terms, in an effort to add clarity to the regulatory requirements of the Program. Second, R18-12-102 is revised to provide clarification of the responsibilities of owners and operators.

The UST preventive requirements, adopted as 18 A.A.C. 12, Article 2, are drafted in accordance with the express authority delegated to the Department under A.R.S. §§ 49-1002, 49-1003, 49-1008, 49-1009, 49-1011, 49-1014, and 49-1021. Furthermore, A.R.S. § 49-1014 grants the Department the express authority to develop those rules necessary to cause the underground storage tank program to be approved by the administrator of the U.S. Environmental Protection Agency, pursuant to 42 United States Code, Section 6991c.

The EPA has developed rules for the approval of state UST programs at 40 CFR 281. The EPA requirements assert that approval cannot be obtained unless the Department can demonstrate that the state program is no less stringent than the federal. Moreover, the Department is restricted, by the Arizona Legislature, within several statutory sections, from adopting regulations which are more stringent than their federal counterpart. Therefore, the regulations pertaining to UST preventive requirements, adopted by the Department, are drafted in furtherance of the EPA requirements and, where required by Arizona law, are no more stringent than their federal counterparts.

The financial responsibility rules, originally certified on September 21, 1992, are adopted for revision. The revisions are to bring the Arizona financial responsibility rule, adopted at 18 A.A.C. 12, Article 3, current with the federal provisions and to provide for 1 additional financial responsibility mechanism.

The rulemaking is a follow up to a terminated rulemaking of late 1994 and early 1995. Prior to its termination in early 1995, the proposed technical standards, financial responsibility, and corrective action rule package was subject to full public comment.

This restarted rulemaking, addressing only technical standards and financial responsibility, has had opportunity for additional public input. Extensive public comment was supplemented in late 1995 by 2 informal round tables. The purpose of the informal round tables was to create an opportunity for participants to comment on, and suggest amendments to, the rule package. The participants at the round tables included members from many different industries and occupations whose companies, careers, or interests might be affected by these adopted rules. Both the full public comment and the additional comments and concerns expressed at the round

tables were incorporated into today's adopted rule package. Therefore, the rule text of the adopted rule is the result of a comprehensive and prolonged series of public comment opportunities.

A. Background for the Adopted Rule

Approximately 3 million underground storage tank systems (USTs) in the United States contain petroleum and/or hazardous substances. According to the U.S. Environmental Protection Agency (EPA) estimates, tens of thousands of these USTs are known to be leaking. This number is expected to increase as presently undetected releases are discovered and as tanks deteriorate with age or are ruptured by human or natural activities. Underground storage tank releases create 2 distinct pathways of harm. First, leaking underground storage tanks have the capacity to contaminate groundwater, a source of over 80% of Arizona's drinking water. Second, the inhalation and ingestion of contaminants creates risk to human health.

Congress passed the Hazardous and Solid Waste Amendments of 1984 ("HSWA") (Public Law 98-616) in response to a national report identifying leaking underground storage tanks as a known or probable source of a significant number of groundwater contaminations. The HSWA of 1984 amended the Resource Conservation and Recovery Act (RCRA) by adding a new Subtitle I entitled "Regulation of Underground Storage Tanks." The new Subtitle I required EPA to establish a national regulatory program for the control of new and existing underground storage tanks and their associated piping that are used to store regulated substances. Under Section 9003 of Subtitle I, EPA was required to establish standards for leak detection, leak prevention, financial responsibility, and corrective action for all underground storage tanks containing regulated substances as necessary to protect human health and the environment. Under the authority of Subtitle I, EPA promulgated regulations for UST systems in 2 rulemakings in 1988, codified at 40 CFR 280.

The purpose of Subtitle I of RCRA is to institute a national standard of regulation for all UST systems which contain regulated substances. Additionally, Subtitle I of RCRA provides the means by which a state can assume the regulatory responsibility from the EPA where the UST requirements of the state are no less stringent than those of that federal agency. The EPA guidelines for state program approval are located at 40 CFR 281.

In response to the environmental threat posed by USTs, the Arizona Legislature enacted numerous laws to regulate UST installation, operation, and removal. Among the areas addressed by the Arizona Legislature are: release detection and record keeping, release reporting, technical standards for tanks, corrective action requirements, tank excise tax and tank registration fees, financial assurance requirements, and provisions for the state assurance fund and grant account.

In addition to the laws relating to UST installation, operation, and removal, the Arizona Legislature mandated under A.R.S. § 49-1014 that the Director obtain EPA program approval, in accordance with 40 CFR 281. The rule is a milestone toward attaining that goal. When state program approval is obtained, the ADEQ rules regulating USTs, rather than federal regulations, will control all UST systems within the state of Arizona, with the exception of those on Indian reservations. Moreover, with program approval, the Department will operate under an agreement with the EPA which clearly delineates a limited EPA role within Arizona, and assures Arizona of its leadership position in administering and enforcing the UST Program. Although certain federally mandated features will remain, the Department will have greater flexibility in administering the program and in responding to the needs of the Arizona regulated community. Finally, UST owners and operators will have only 1 set of rules with which to comply.

B. Relationship Between the Department's Adopted Rule and the Federal Regulations.

In accordance with federal law, a state seeking state program approval from the EPA must promulgate rules which are no less stringent than their federal counterparts. Additionally, several statutory sections of Arizona state law restrict the Department from adopting regulations which are more stringent than their federal counterpart. Furthermore, A.R.S. § 49-1014 dictates that the Department develop rules "... necessary to provide procedures for the administration..." of the program. This preamble subsection explains the differences between the provisions of federal regulations and those of the adopted rule.

1. Technical Requirements

The technical requirements of the rule are very similar to the federal regulation, except for 2 identified areas: notification and closure. Since Arizona state law permits variation from the federal regulation in these areas, the Department has deviated from the federal regulation in an effort to clarify and improve the purpose and function of the rule.

The explanation for variance from the federal requirements in the areas of notification and closure are as follows:

a) Notification Requirements

The notification requirements, adopted as R18-12-222, are drafted in accordance with the express authority delegated to the Department under A.R.S. §§ 49-1002(A) and 49-1014.

The EPA UST Program requires a 1-time notification for each system. Historically, when EPA was in the very early stages of the UST Project, they were under a congressional mandate to accurately survey the national UST population. Although the immediate objective of data collection was met, the provision for a 1-time only notification severely inhibited the federal program's viability. An accurate and current database is essential where a large universe is subject to regulation. EPA regional offices have frequently solicited re-notification by UST owners and operators. These solicitations have been, and will be, a necessity if the federal program is to function.

The Arizona Legislature and the Department recognized this very real problem and provided the solution in A.R.S. §§ 49-1002 and 49-1014. These 2 Sections provide for regular updating of system information, as necessary, to

Notices of Final Rulemaking

administer the Program. A.R.S. § 49-1002 stands alone in establishing notification requirements without reliance on any federal rules and does not contain the 1-time restriction. A.R.S. § 49-1014 requires the Department to adopt rules which are necessary for the administration of the UST Program.

The Department cannot effectively administer the UST regulatory program without a current database accurately reflecting the detail associated with the universe of owners, operators, facilities, and systems. The database provides information essential to program funding (annual tank fee and excise tax). That same database is necessary to the efficient processing of claim applications against the State Assurance Fund. The database also provides an important element in the Department's customer service. Reviewing the UST database is an integral part of any due diligence search because it provides information vital for efficient property transfers and other commercial activities.

A.R.S. § 49-1002 provides a list of circumstances under which an owner is required to notify the Department. Subsection (A) provides that the owner notify the Department of the specifics of "the tank's age, size, type, location, and use." Because the owner is required to submit the information, any change in ownership will result in a new Notification Form, thereby maintaining the currentness of the Department's records.

In enacting Title 49, Chapter 6, the Legislature has provided that owners and operators notify the Department when a UST system at a facility undergoes a change in status. Therefore, this may result in more frequent notifications than owners and operators have experienced in the past. In fact, any frequency of notification, when this rule is effective, will not be substantially increased because the Department has, since May 1994, required submission of a Notification Form when the listed circumstances of a system change. This is currently being done under the authority of A.R.S. §§ 49-1002 and 49-1014.

To lessen the work associated with completing a Notification Form, the Department will accept photocopies of those pages which are unaffected by the change in the system in question. In addition, the Department will accept, if legible, the use of "white-out" to make minor changes on affected pages. The Department will still require the submission of an original signature and date on the authentication certification. A photocopy of a signature and date is not acceptable since the purpose of the certification is to attest that the information submitted is true and accurate to the best of the signer's knowledge. Likewise, where a change is made which necessitates re-submission of a consultant or contractor's certification, an original signature and date is required.

Some members of the regulated community requested that the ADEQ rule be expanded to require that, when interest in a UST is transferred, the transferor provide to the transferee copies of all records which this rule requires be maintained by the system owner or operator. While the Department encourages transferors and transferees to communicate and provide each other with all necessary information needed to comply with the requirements of this rule and other regulations applicable to the UST, the Department lacks authority to meet the request.

b) Closure Requirements

A 2nd variance between the adopted rule and the federal requirements is found in closure. The closure requirements, adopted as R18-12-270 through R18-12-274, are drafted in accordance with the express authority delegated to the Department under A.R.S. §§ 49-1008 and 49-1014.

The requirements surrounding temporary closure differ from those found in the federal regulations. The Department adopts a requirement for notification when a system goes into temporary closure. Federal regulations do not require a similar notification. The Department has added this requirement for 2 reasons: 1) to establish a firm date when a system enters temporary closure; and 2) to ensure that the requirements during temporary closure are met.

In order to enforce the 12-month temporary closure requirement, it is essential that the Department be notified of the date the tank has been placed into temporary closure. In the past, the Department had no way of knowing when a system entered into temporary closure, and often the owner or operator failed to maintain a record of the temporary closure. The notification requirement will allow the Department to remind the owner or operator of the 12-month requirement, so that compliance may be maintained. Furthermore, the requirement may facilitate early discovery of a release from a temporarily closed system, as the site must, in almost all cases, be investigated within 12 months following the system going into temporary closure.

Several requirements must be followed while a system is in temporary closure. Corrosion protection must be maintained and, unless the system is empty, leak detection must be continued. In addition, systems temporarily closed for more than 3 months must cap and secure all lines (excluding vent lines), pumps, manways, and ancillary equipment. The notification will allow the Department to remind the owner or operator of these provisions. Failure to cap and secure often results in 3rd parties dumping "foreign substances" into the temporarily closed system, thus possibly creating a hazardous waste tank and making the owner or operator subject to all of the federal and state hazardous waste regulations.

Another variance in the temporary closure requirements involves extension of the temporary closure period. Both this rule and the federal provisions have the objective of preventing a release from an UST system which is temporarily closed from going undetected for several years. Federal regulations allow tanks meeting new or upgraded tank standards to remain in temporary closure indefinitely. Under the Arizona rules, substandard tanks are required to be permanently closed at the end of the 12-month period unless permission is granted for an extension. Furthermore, the adopted rules require that a request for a temporary closure extension must be made for all UST systems at least 30 days prior to the expiration of the 12-month period. Substandard systems are required to have completed a site assessment prior to requesting an extension.

Notices of Final Rulemaking

The federal regulations (40 CFR 280.72) provide that a site assessment at the time of permanent closure or change-in-service is not required if 1 of the external release detection methods (vapor monitoring or groundwater monitoring) is operating in accordance with requirements of 280.43 and indicates that no release has occurred. The Department is adopting this provision for extensions of temporary closure on new or upgraded systems. Where an UST system meets new or upgraded tank standards and has an external release detection method in place at the expiration of temporary closure, a site assessment is not required to accompany the extension request or to receive the extension. As with the federal requirements, there is a provision that no release has been detected. Documentation must be provided with the extension request which demonstrates: 1) the external release detection method was operated or installed in accordance with the requirements; and 2) a release has not occurred.

Provision has also been made to assure that the owner or operator is not deemed to have violated the 12-month limitation if there is a delay in the Department responding to a temporary closure extension request. If the extension request is properly submitted and the Department is unable to inform the owner or operator prior to the expiration of the 12-month temporary closure period, the UST will be considered to be in extended temporary closure until the Department's decision is relayed to the requestor. Further, if the request is denied, the system will be considered to be in extended temporary closure for up to 180 days from the date the request is denied. The 180-day period allows time for the system to be brought back into active service or permanently closed.

The provisions for conducting a site assessment at closure (R18-12-272 and R18-12-280) were drafted with detail to assist owners and operators as well as their consultants and contractors in understanding what is required for compliance. The Department considers this additional detail beneficial in that owners and operators know what services to purchase, the UST service providers (consultants and contractors) know what is required by the Department, and the Department can review closure information in a more efficient manner and issue closure letters in a more expeditious time frame.

2. Financial Responsibility

The financial responsibility rule amendments contain 3 variances from the federal provisions: facility identification numbers on documents; certificate of deposit as an available mechanism for attaining financial responsibility; and provision for release from financial responsibility. These variances in the adopted rule will allow for more efficient handling of financial responsibility documents and add clarity to the federal model.

a) Facility Identification Number

The 1st aspect of financial responsibility which differs from the federal regulations is found at R18-12-303(F). Prior to this revision, R18-12-303(F) required those facilities or tanks which are subject to the Department's jurisdiction be so indicated. The revision now requires that the Facility Identification Number be added to financial responsibility mechanisms and supporting documents. Since this information is contained on virtually every document submitted to the UST Program and is readily available to owners and operators, its inclusion should be very simple. Having this number on the financial responsibility mechanism reduces the Department's document processing time, and aids in administration of the Program in accordance with A.R.S. § 49-1014.

b) Certificate of Deposit

The 2nd variance to financial responsibility is the addition of the certificate of deposit (CD) as an alternative financial assurance mechanism. The Department has developed this alternative in the interest of finding a method for owners and operators to comply with their financial assurance requirement without having to pay an initial fee. The only other mechanisms which do not have an initial cost are the financial test of self-insurance (which requires a minimum of 10 million dollars in tangible net worth) and the State Assurance Fund (SAF) which has a deductible of at least \$5,000 before it can be accessed. Other mechanisms either have a fee issued by the provider or require a standby trust agreement, or both. Common charges for the standby trust are an initiation fee of about \$1,500 and about \$2,500 per year for administration. The CD is available to all owners and operators, including political subdivisions. The Department foresees this alternative mechanism used primarily to provide coverage for the deductible level under the SAF. EPA has approved a CD in at least 1 other state under the authority of 40 CFR 280.108.

c) Release from Financial Responsibility Requirements

The 3rd variance is found at R18-12-323 (Release from financial responsibility requirements). The federal rule provides that owners and operators are relieved from the requirement to provide financial responsibility for petroleum UST systems which are "properly" closed. The preamble to the final rule on financial assurance published in the 53 FR 207) notes EPA's intent to relieve owners and operators of the financial responsibility requirements only after a system was permanently closed or had completed a change-in-service.

The Department believes that the EPA approach as discussed in the federal preamble is logical. It is only during the completion of permanent closure or change-in-service that the site is investigated to determine if a release has occurred. If owners and operators cease to have financial responsibility in place before it is determined that protection is no longer needed, a release could be discovered and the financial instrument designed to assist with the monetary part of the problem would not be available to do so. Therefore, the text of R18-12-323 has been revised to clarify the Department's intent.

Arizona Administrative Register
Notices of Final Rulemaking

C. Section-by-Section Explanation of the Adopted Rules

ARTICLE 1. DEFINITIONS

Overview Article 1 contains the definitions of terms used in the subsequent Articles and clarifies the respective responsibilities of owners and operators.

R18-12-101 Definitions: The rule revises this Article to provide only 1 Section containing definitions (R18-12-101). The Department received comments to the effect that 3 separate sections were cumbersome. In addition to the reorganization into 1 Section, the revision includes several "new" terms. Those definitions necessary for Article 2 and the revision to Article 3 have been added along with the definitions used with Article 7 which implements the Grant Program (1 A.A.R. 462, May 12, 1995). Article 7 is currently in the adoption phase of the rulemaking process. Many of the definitions originally in sections 102 and 103 remain unchanged; however, because they are "new" to R18-12-101, they appear underlined as new text. Additionally, since these definitions are treated as new definitions, no strike-outs will appear.

One last change repeals the definition Section at R18-12-401 and transfers those definitions to R18-12-101. Many of the definitions originally in R18-12-401 remain unchanged; however, because they are "new" to R18-12-101 they appear underlined as new text. Additionally, since these definitions are treated as new definitions, no strike-outs will appear.

Some alterations have been made in the definitions of terms in the current Certified Article 1. These alterations are being suggested due to the Department's concern relating to clarity and to achieve state program approval. All changes are shown in underlined text.

The definition of "farm tank" requires, as requested by some members of the regulated community, clarification as to intent. Specifically, the definition sets forth the description of a tank located on a farm and goes on to provide some examples. The difficulty centers on the use of the words "including" and "includes" which appear in the definition. The Department considers these words to mean that within the universe of "farms" those specific examples are included; however, the list is not an attempt to specifically designate every possible application. The same is the case with other definitions using these terms to assist the reader in understanding the intent of the Department.

R18-12-102 Responsibilities of Owners and Operators: This revision is merely a restatement of the statutory language at A.R.S. § 49-1016(A). The purpose of this revision is to address confusion in the regulated community over which party is required to comply with any 1 requirement and whether both the owner and the operator are required to maintain separate documents or submit separate reports to meet the same requirement.

The term "owners and operators" is used where either the owner or operator may comply with the requirement. The term does not mean that both must comply. The term "owners or operators" means that when either 1 acts, that party, be it the owner or the operator, shall be responsible for complying with the requirement. For example, in the provisions for sending a notice of cancellation to the entity using that financial responsibility mechanism, the rule would provide for the notice to be sent to the party that initially filed the mechanism. In this case, the rule reads "to the owners or operators".

R18-12-103 (Repealed): This Section serves no purpose under the reorganization of Article 1 and is being repealed.

ARTICLE 2. TECHNICAL REQUIREMENTS

Overview The adopted UST preventive requirements rule provides standards which UST system owners and operators must meet. The Section on applicability is of prime importance in understanding the rule. The rule also establishes prohibition of the installation of certain types of UST systems unless specific requirements are met. The rule covers installation of new UST systems, upgrading of existing UST systems, notification provisions, and operation and maintenance requirements including leak detection. In addition, the rule contains standards for conducting temporary closure, permanent closure, and change-in-service. The adopted rule also provides sampling requirements along with specific codes of practice to be used for compliance.

The 2 areas of the adopted technical requirements rule, notification and closure, that contain provisions which vary from the federal rule have been discussed in detail above in answer 5(B) of this preamble.

R18-12-210, Applicability: This Section places responsibility for compliance on owners and operators of Underground Storage Tanks. It also provides for the exclusion of certain systems, in addition to those which are excluded by statute (A.R.S. § 49-1001(17)).

R18-12-211, Prohibition for Certain UST Systems: This Section provides the requirements for installation of a system which is deferred under R18-12-210(C). These are minimum requirements which will reduce the probability of these systems experiencing a release due to design, corrosion, or compatibility failures during their operational life. These deferred systems may, at a later date, become subject to full or additional regulation.

R18-12-220, Performance Standards for New UST Systems: This Section establishes the requirements that newly installed UST systems be protected against corrosion and be provided with spill and overfill prevention equipment. The objective of this Section is to minimize the probability that these systems will experience a release during their operational life.

R18-12-221, Upgrading of Existing UST Systems: By December 22, 1998, all existing UST systems must meet the requirements of this Section, be permanently closed or undergo a change-in-service. The standards are basically the same as those for new systems found in the previous Section and are designed to accomplish the same purpose.

R18-12-222, Notification Requirements: This Section sets forth the contents of and uses for the Notification for Underground

Arizona Administrative Register
Notices of Final Rulemaking

Storage Tank form. It also specifies when a revised form must be submitted. The differences between the requirements of this Section and the federal provisions for notification are discussed above in question 5(B) of this preamble.

R18-12-230. Spill and Overfill Control: This Section establishes the performance standards for devices which will prevent releases of regulated substances from spills and overfills. A spill occurs when the hose from the supply truck or other vehicle, is disconnected from the fill pipe of the tank. An overfill, as the term suggests, occurs when an attempt is made to fill a tank beyond its capacity.

R18-12-231. Operation and Maintenance of Corrosion Protection: The objective of the requirements of this Section is to ensure that a properly installed corrosion protection system's effectiveness is maintained.

R18-12-232. Compatibility: This Section requires that the substance stored in the UST be able to be in contact with the material of which the tank is made without damage to the integrity of the tank. The compatibility requirement remains throughout the life of the tank and must be considered when the regulated substance changes.

R18-12-233. Repairs Allowed: This Section permits repairs to most components of an UST system and establishes the requirements for such repairs and maintenance of associated records.

R18-12-234. Reporting and Recordkeeping: This Section provides a cross-reference to the reporting and recordkeeping requirements found throughout the Section. It serves as a 1-stop reference to assist the owner and operator in locating and meeting the requirements.

R18-12-240. General Release Detection Requirements for all UST Systems: This Section sets the basic requirements for the end result of leak detection systems; that is, to detect a release within 30 days of its inception. The Section also establishes compliance dates and probabilities of the selected leak detection in meeting the performance standards. Some additional time limits are established in R18-12-241 and R18-12-242.

R18-12-241. Release Detection for Petroleum UST Systems: This Section establishes requirements for both petroleum tanks and connected piping. Specific time limits are placed on the use of tank tightness testing with inventory control as leak detection compliance. The requirements for leak detection on piping depends on the type of system (pressure or suction) and the design of the system.

R18-12-242. Release Detection for Hazardous Substance UST Systems: Requirements for leak detection before and after December 22, 1998, are Established by this Section. After that date, all hazardous substance systems must either close or have secondary containment.

R18-12-243. Methods of Release Detection for Tanks: This Section establishes requirements for a total of 7 specific types of leak detection components and provides for other methods of equivalent protection. The Department was encouraged to separately include some detection methods which have been approved by EPA under 40 CFR 280.43(h). This was rejected because the EPA approval may be withdrawn at any time which might leave the Arizona rule less stringent than the federal. Also, some of the EPA approvals require additional research and proof of compliance before the Department would be willing to provide general approval for use of the methodology.

R18-12-244. Methods of Release Detection for Piping: This Section provides requirements for automatic line leak detectors and periodic pressure tests. It also provides that any of the methods used for tanks may be used for piping if they are appropriate.

R18-12-245. Release Detection Recordkeeping: This Section sets out the kinds of records and the respective time during which they must be maintained. R18-12-234 sets forth where the records must be maintained.

R18-12-250 through R18-12-265 (Reserved)

R18-12-270. Temporary Closure: This Section pertains to the notification provisions, requirements, and time periods associated with placement of a UST system into temporary closure. The variance from the federal provisions is described in question 5(B) of this preamble.

R18-12-271. Permanent Closure and Change-in-service: This Section sets forth the requirements for permanently closing an UST system or completing a change-in-service. The purpose is to ensure that releases from the system will not occur in the future and that any past release is discovered. The variances from the federal provisions are described in Section 5(B) of this preamble.

R18-12-272. Assessing the UST site at Closure or Change-in-service: This Section pertains to the site assessment requirements. Its provisions relate to the sampling requirements of R18-12-280.

R18-12-273. Application of Closure Requirements to Previously Closed Systems: This Section provides the clarification for the Department to require permanent closure, in accordance with current requirements, of any system which was previously closed if a release or suspected release poses a threat to human health or the environment. This provision is necessitated by past methods of closure which resulted in a system being taken out of active service, but which did little or nothing to discover leaks or take steps to be sure they would not occur in the future.

R18-12-274. Release Reporting and Corrective Action for Closed Systems: This Section clarifies that if a release is discovered during temporary closure or the site assessment, which must accompany permanent closure or change-in-service, it must be reported and corrective action conducted, as required under A.R.S. §§ 49-1004 and 49-1005.

R18-12-280. Sampling Requirements: This Section gives specific directions as to how samples are to be taken and the conduct of

related activities. Only with valid samples can a truly valid closure report be provided to the UST owner or operator. The closure report may prove to be 1 of the major documents needed to close a sale of the property. This Section provides the standards needed to attain the validity.

R18-12-281. UST System Codes of Practice and Performance Standards: This Section is a consolidation of all of the industry standards which are referenced throughout the UST technical requirements rule. It is 1 place where the reader may look to obtain a comprehensive list of these documents. Further, by using this Section for the consolidation, the rule text is not interrupted by document reference numbers, titles, or the incorporation by reference language.

ARTICLE 3. FINANCIAL RESPONSIBILITY

Overview The rule amends 18 A.A.C. 12, Article 3. This Article describes the mechanisms by which UST owners and operators may establish that they are financially responsible for remedying leaks.

The adopted rule does the following: 1) adds of 4 alternative financial assurance mechanisms available to local government entities (R18-12-314 through R18-12-317); 2) authorizes the use of the UST State Assurance Fund (SAF) as a partial financial assurance mechanism, (R18-12-311) to the extent it is and remains approved by EPA; 3) adds of a Certificate of Deposit as an alternative financial assurance mechanism (R18-12-310); 4) clarifies that the release from financial responsibility requirements (R18-12-323) is only after a UST system has been permanently closed or completed a change-in-service; 5) requires maintaining financial responsibility records either at the facility or a readily available alternative site (R18-12-301(D); and, 6) requires that the Facility Identification Number be provided for each facility appearing on a Financial Responsibility mechanism (R18-12-303(F)).

A significant aspect of this revision is the certificate of deposit mechanism. The certificate of deposit is a financial responsibility mechanism for which there is no direct counterpart in the federal rule. The financial instrument does, however, meet the EPA requirements for a mechanism and it has been approved for general use by EPA, under the authority of 40 CFR 280.108, in at least 1 state. The addition of the certificate of deposit represents an additional option which will be available to owners and operators for their Arizona UST systems.

ADEQ recognizes that it is easier for regulated entities to follow state rules when rule numbering parallels that of federal regulations. In continuing to follow a pattern which parallels the federal regulations, the 4 alternative local government mechanisms were placed in R18-12-314 through R18-12-317. The currently existing text of those Sections were renumbered as subsequent Sections. This caused citations throughout the current certified rule text to be incorrect and require alteration. Sections containing only citation corrections or housekeeping alterations are not addressed below.

R18-12-301. Financial Responsibility; Compliance Dates; Allowable Mechanisms; Evidence: This Section has been altered to provide for the use of the 4 alternative mechanisms, designed for local governments, as well as the SAF and the Certificate of Deposit as allowable mechanisms. In addition, subsection (C) was revised to clarify what documents must be submitted to the Department as evidence of financial responsibility. The final alteration is in subsection (D) which was revised to provide for the record keeping requirements omitted from the current certified rule. With this change, the recordkeeping requirements of the federal and state rule are now analogous.

R18-12-303. Amount and Scope of Required Financial Responsibility: Subsection (F) has been revised to require that the Facility Identification Number be shown in the facilities list which is part of each financial responsibility mechanism.

R18-12-307. Insurance and Risk Retention Group Coverage: Subsection (B) has been revised to include the definition of "termination." The term was defined in Article 1 of the currently certified rules; however, because it pertains only to the forms incorporated by reference in this Section the move was effected.

R18-12-310. Certificate of Deposit: This Section was reserved under the presently Certified Article 3. The revision allows for use of a certificate of deposit (CD) as a partial financial responsibility mechanism. The additional mechanism is available to all owners and operators to use as they find most advantageous in establishing compliance with the corrective action requirements of R18-12-303. The CD may not be used to cover 3rd-party liability requirements.

This Section provides that the CD have the Department listed as payee and sets forth the requirements for financial institutions issuing the CD. When a CD is cashed, any funds in excess of the amount of financial responsibility being demonstrated will be returned to the owner or operator. The Section also provides that funds which are not immediately used to pay corrective action expenses be placed in a designated Department account to pay additional related bills or for distribution to the owner or operator after the corrective action is accomplished or the SAF deductible met. This provision allows the funds to be segregated from those of the owner or operator and prevents commingling with other State funds. It also avoids the necessity of the owner or operator setting up a standby trust agreement. The cost of establishing a standby trust would eliminate any economies realized from using a CD for financial responsibility compliance.

The Department believes that the CD will be a viable mechanism to cover the "deductible" portion of corrective action expenses where the State Assurance Fund is used as a partial mechanism. While this may not be advantageous to those who desire to purchase insurance at this time, it will become so when the upper coverage limit of the SAF reaches \$1 million on July 1, 1996.

R18-12-311. State Fund or Other State Assurance: This Section was reserved under the presently certified Article 3. The revision allows for use of the UST Assurance Fund, commonly referred to as the SAF, as a partial financial responsibility mechanism. The text is intentionally written without mention of the name of the Arizona fund nor is there a restriction to its use as a partial mechanism. This was done to permit the maximum amount of flexibility as the SAF evolves through the legislative process. This flexibility is attained by simply providing for the use of any state fund where coverage is available to owners and operators for their

Notices of Final Rulemaking

Arizona facilities and to the extent and during the time the fund is approved by a U.S. EPA Regional Administrator. This Section also provides for an election form to be used by those who find using the SAF for financial responsibility compliance to be advantageous. Provisions are included for actions by the Department should the fund no longer be approved.

R18-12-314. Local Government Bond Rating Test: This Section now provides an alternative mechanism for use by local governments. To use this mechanism an entity simply has to demonstrate that certain amounts of general obligation or revenue bonds are outstanding and that all outstanding bonds carry certain ratings. The paperwork for the demonstration is simple and straightforward. The provisions are identical to the federal rule.

R18-12-315. Local Government Financial Test: This Section now provides an alternative mechanism for use by local governments. This mechanism utilizes a financial test developed specifically for governmental entities, a test which recognizes governmental accounting principles. This is a viable mechanism for smaller governmental entities which cannot pass the bond rating test because the amount of investment rated outstanding bond issues is less than 1 million dollars or because they cannot issue general obligation or revenue bonds.

R18-12-316. Local Government Guarantee: This Section now provides another alternative mechanism for use by local governments. The entity which uses this mechanism must secure a guarantee from another local government or from a state. If a guarantee is secured from another local government, the guaranteeing government must pass the bond rating test of R18-12-314, the financial test of R18-12-315, or the local government fund requirements of R18-12-317. The guaranteeing government must have a "close governmental relationship" (as defined in Article 1) to the government being guaranteed.

R18-12-317. Local Government Fund: This Section provides the final type of alternative mechanism for exclusive use by local governments. The entity which uses this mechanism must establish a dedicated fund or use an existing dedicated fund balance to demonstrate that a timely response can be made to a release. There are several alternatives from which the local government may select if a local government fund is chosen.

R18-12-319. Cancellation or Nonrenewal by a Provider of Financial Assurance: Subsection (A) has been revised to account for actions related to local governments.

R18-12-323. Release From Financial Responsibility Requirements: The term "properly" has been revised to provide that release from the financial responsibility requirements is permitted only after the system has completed permanent closure or change-in-service.

ARTICLE 4. UNDERGROUND STORAGE TANK EXCISE TASK

Overview R18-12-401 is being repealed because the definitions for Articles 4 have been moved to R18-12-101. The balance of Article 4 remains unchanged.

7. **A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a local government of this state:**
Not applicable.

8. **Summary of the economic, small business and consumer impact statement (EIS):**
This Section contains a summary of the Department's final Economic Impact Statement (EIS) regarding the adoption of Articles 1-4, Chapter 12, Underground Storage Tanks, Title 18, Environmental Quality. A copy of the full EIS may be obtained by contacting David Lillie, Department of Environmental Quality, 3033 North Central Avenue, Phoenix, Arizona 85012, or by telephone at (602) 207-4436 or (from within Arizona) toll free at (800) 234-5677, extension 4436.

OVERVIEW

UST owners and operators must comply with federal regulations and Arizona statutes, which have been in effect for a number of years. Further, these rules are consistent with and no more stringent than federal requirements, except as noted below. This EIS analyzes the costs, savings, and benefits that are expected to accrue to the entities impacted. The probable benefits of these rules are expected to outweigh probable costs. Most of the benefits cannot be monetized, but they nonetheless represent potential benefits.

The definitions contained in Article 1 create no economic impacts, but certain technical standards contained in Article 2 will create incremental impacts. A minimal incremental cost is expected in 2 areas where this rule differs from federal regulations. The 2 areas are notification and closure. Rule provisions contained in Article 3 are not expected to generate even a minimal cost to owners and operators.

Financial responsibility requirements contained in Article 3 are anticipated to generate de minimis costs to owners and operators. This is because: 1) Article 3 adopts the provisions currently contained in federal regulations; 2) The Article follows the intent of federal regulations regarding a properly closed UST system; 3) The article allows the State Assurance Fund (SAF) to be used as a partial financial responsibility mechanism as so approved by EPA in April 1994; 4) The addition of a Certificate of Deposit (CD) as a partial financial responsibility mechanism will not generate costs to UST owners or operators, but may result in a financial benefit; 5) The requirement for owners and operators to provide a facility identification number on all documents submitted to the Department may result in de minimis costs.

ENTITIES IMPACTED

No revenue or payroll impacts are anticipated for federal, state, local government, or private entities. Likewise, these rules are not expected to impact private or public employment at any UST facility. The persons who will be directly affected, bear the costs, or

Notices of Final Rulemaking

benefit from these adopted rules are identified as follows: owners and operators of UST facilities including government, consultants and contractors, the Department, and the general public.

Owners and Operators of UST Facilities

UST Facilities include private and public owners and operators. The distribution of UST facilities is about 85% non-government and 15% government. All classes of owners and operators must comply with the technical requirements of Article 2. Article 3, Financial Responsibility, provides an exemption for federal and state owned UST systems. Government and private ownership are not analyzed separately in this EIS because the impacts are anticipated to be very similar.

Incremental Costs of Notification:

Federal regulation requires a 1-time UST notification. Article 2 requires owners to notify the Department when any of numerous changes occur. The regulated community has been familiar with the requirements set forth in this rule for some time and any incremental cost associated with these rules is incalculable. The total annual cost for all owners to complete notification forms is estimated to fall between \$4,800 and \$9,600. This estimate represents the entire regulatory burden of notification and not the incremental burden which is attributed to the adoption of these rules.

Incremental Costs of Extensions of Temporary Closure

Federal regulation does not require owners and operators to provide a notice that their UST system has been placed in temporary closure. It also allows UST systems which meet new or upgraded tank standards to remain in temporary closure indefinitely. In contrast, Article 2 requires owners and operators to notify the Department when a UST system has been placed in temporary closure; and they must request an extension from the Department before the 12-month period of temporary closure expires unless the system will be permanently closed (including change-in-service) or returned to operation. The cost to a UST owner or operator to comply with the extension requirements of temporary closure is estimated at \$2,500. This represents the cost of a site assessment. Requesting an extension is not a common practice because nearly all owners and operators permanently close their UST systems. The Department cannot estimate how many UST owners or operators will request extensions on an annual basis.

Incremental Costs of Facility Identification Numbers on Financial Responsibility Mechanisms

Article 3 requires UST owners and operators to include a facility identification number on financial responsibility mechanisms and supporting documents. Because this compliance burden is negligible, no incremental cost can be calculated.

Political Subdivisions

The Department expects that government owned and operated USTs will be impacted in a similar manner as private UST facilities. Refer to the discussion above.

Consultants and Contractors

This group will benefit minimally from increased revenues for performing site assessments for temporary closure requests. Part of these revenues to contractors will be offset by increased costs of doing business. Refer to the discussion above temporary closure.

Department

The incremental impacts of this rule on the Department are expected to be minimal. Most impacts will arise from processing notification forms and reviewing extension requests for UST facilities in temporary closure. The impact to the Department is so minimal that it is not expected to cause a change in the Department's current workload. This rule will not create the need for additional employees. Refer to the discussion about notification and temporary closure.

PROBABLE BENEFITS OF THESE RULES

Although incremental costs are minimal, these rules are expected to generate benefits which will outweigh probable costs. Because compliance costs to UST owners and operators are minimal, the Department does not anticipate that any increased costs of doing business will be passed on to consumers of regulated substances. Probable benefits are shown below:

Owners and Operators of UST Facilities

- Improved management of UST systems
- Reduced transaction costs
- Mono-regulation after Department receives State Program Approval from the EPA
- Early detection of releases leading to reduced cleanup costs

Consultants and Contractors

- Increased revenues for performing site assessments

Department

- Improved management of the UST program
- State Program Approval from the EPA

Notices of Final Rulemaking

General Public

- Increased protection of human health and environment
- Awareness of a better managed UST program
- Reduced costs due to early release detection and minimized cleanup costs

IMPACTS ON SMALL BUSINESSES

The number of businesses in this state classified as a small business is unknown. However, the Department estimated that as many as 2/3 of the 3,365 active UST facilities could represent small businesses. Table 1 in the full EIS lists the types and number of active facilities which comprise the universe of UST facilities. It also includes the number of closed facilities by type because some of these potentially could be impacted by these rules.

The Department considered various methods for reducing the impacts of these rules upon small businesses, but it was unable to legally or feasibly provide different requirements for them. The main reason was that the Department must promulgate rules which are consistent with federal regulations and statutory authority. However, in writing these rules, the Department attempted to create various options to assist small businesses. For example, owners or operators can use the SAF and the CD as partial financial responsibility mechanisms. This is anticipated to be a proportionately greater benefit to small businesses. Additionally, owners or operators may meet notification requirements by making corrections on copies of previously submitted pages of the Notification Form. They also may submit new pages where changes have occurred if copies of the remaining pages which were unchanged also are submitted. This should help to ease the notification burden.

ANTICIPATED BENEFITS

Although probable benefits previously have been identified, additional information about these benefits is shown below. The Department anticipates that many of these benefits specifically will benefit small businesses.

- Property transfers will be facilitated through more complete documentation of site assessment results upon closure.
- Standards for site assessment at the time of closure may provide cost saving to some owners transferring property because subsequent sampling could be reduced.
- These rules should help the Department secure SPA. This will be beneficial to small businesses which must comply with only 1 regulatory authority.
- These rules should not create an additional educational need for owners and operators because the majority of regulations have been in effect since 1988.
- These rules clarify the requirements currently in place. This should increase efficiency and potentially provide cost savings to owners and operators.

The compliance burden resulting from these rules is minimal. Notification, facility identification, and some other rule provisions are examples of administrative costs. Other costs to owners and operators, such as paying for site assessments, also are minimal. It is not expected that these costs will adversely affect revenues or payroll expenditures of either small or large businesses.

LESS INTRUSIVE OR COSTLY ALTERNATIVES

The Department is mandated to promulgate rules that are consistent with and no more stringent than federal regulations (except for notification and closure). As a result, the Department is limited to the extent less intrusive or less costly rule alternatives could be incorporated.

9. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

The Concise Explanatory Statement contains all changes made to the rules between proposal and final. The Concise Explanatory Statement is on file at the Secretary of State and the Department of Environmental Quality.

The most significant comments and changes to the rule are noted in item #10 of this final rule.

10. A summary of the principal comments and the agency response to them:

CONCISE EXPLANATORY STATEMENT

I. CHANGES BETWEEN THE PROPOSED RULES AND THE ADOPTED RULES

Changes in the rules are shown as follows:

No Change	Standard Type
Removed/amended language	Strike Through
Added language	<u>Underlined</u>

II. CHANGES INITIATED BY THE DEPARTMENT

1. The Department has instituted numerous grammatical and stylistic changes to the rule text. These changes do not have any impact upon the substance of the rule, but are merely to make the rule more readable, consistent and to assure that the text complies with the rule writing conventions established by the Office of the Secretary of State. For example, the elimination of the terms "paragraph" and "subparagraph" in favor of using "subsection" for all designations below the Section level. Addi-

Arizona Administrative Register
Notices of Final Rulemaking

tionally, written numbers were replaced with Arabic numbers ("Ten" replaced with "10"), and "UST's" was replaced with "USTs."

2. The definitions of "Applicant", "Current assets", "Local government", and "Reserved and designated funds" in R18-12-101 of the proposed rule were revised during the formal comment and adoption period of the UST Grant Rule. Those definitions in this rulemaking have been revised to conform to those of the Grant adoption. The Grant rule proposal was published in the November 3, 1995, edition of the *Arizona Administrative Register*. The Grant rules were adopted by the Director on March 19, 1996. The definitions are revised as follows:
 4. "Applicant" means, for the purposes of Article 7 only, an owner or operator who applies for a grant from the UST grant account in accordance with the provisions of Article 7 of this Chapter.
 25. "Current assets" means assets which can be converted to cash within 1 year and are available to finance current operations or to pay current liabilities ~~which can be converted to cash within 1 year.~~
 58. "Local government" means a County, city, town, school district, water and aqueduct management district, irrigation district, power district, electrical district, agricultural improvement district, drainage and flood control district, tax levying public improvement district, local government public transportation system, and any political subdivision as defined under A.R.S. § 49-1001(12).
 78. "Reserved and designated funds" means those funds of a nonprofit, not-for profit, or local government entity which, by action of the governing authority of the entity, or by the direction of the donor, or by statutory or constitutional limitation, may not be used for conducting UST upgrades, replacements, or removals, or for installing UST leak detection systems, or conducting corrective actions, including payment for expedited review of related documents by the Department, on releases of regulated substances.
3. R18-12-222(G) is changed to eliminate the reference to "a tank" since the definition of tank may include items beyond the scope of the UST system. For the sake of clarity and continuity, the Department has made additional changes. The revised rule reads as follows:
 - G. In the case of a change of ownership of an UST system ~~or a tank~~, 1 of the following shall occur:
 1. When a vendor sells an UST system or a tank for use as an UST after May 8, 1986, the vendor shall inform the purchaser, on a form prescribed by the Department, that the Resource Conservation and Recovery Act (RCRA) requires owners of certain underground storage tanks to notify the Department within 30 days of the existence of the tank.
 2. ~~Where~~ When a person transfers ownership of an UST system, both of the following shall occur:
 - a. The transferor shall inform the Department in writing of the transfer of its interest in the UST system including the name and address of the transferor and transferee, name and telephone number of the contact person for the transferee and effective date of the transfer. In addition, the transferor shall advise the transferee of the notification requirements of this Section, utilizing the form referenced in subsection (1) above.
 - b. The transferee shall submit to the Department a completed Notification Form within 30 days of the transfer of interest.
4. R18-12-231 the Department, for the sake of clarity and consistency, has amended this Section. The revised rule reads as follows:
 - A. A corrosion protection system shall be operated and maintained to continuously provide corrosion protection to the metal components of an UST system which are subject to the corrosion protection requirements of R18-12-220 and R18-12-221 ~~that portion of the tank~~ and piping that routinely contain regulated substances and are in contact with the ground.
5. R18-12-272(A)(2) contains a designation error. R18-12-272(A)(2)(g) has been redesignated as R18-12-272(A)(2)(f) and all cross-references have been changed accordingly.
6. R18-12-301(C), the Department for the sake of clarity and continuity, has amended this Section. The revised rule reads as follows:

Owners and operators shall submit evidence of compliance ~~any 1 or combination of the assurance mechanisms specified in R18-12-305 through R18-12-312, and R18-12-314 through R18-12-317 which are used to comply~~ with the requirements of this Article. Owners and operators shall submit to, and maintain with, the Department a copy of any 1 or combination of the assurance mechanisms specified in R18-12-305 through R18-12-312, and R18-12-314 through R18-12-317 ~~the instrument(s)~~ currently in effect along with a copy of the standby trust agreement, if required. Owners and operators using an assurance mechanism specified in R18-12-305 through R18-12-312 and R18-12-314 through R18-12-317 shall submit to, and maintain with, the Department an updated copy of a certification of financial responsibility worded as provided in 40 CFR 280.111(b)(11)(I), except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.111(b)(11)(I), as amended as of July 1, 1994 (and no future editions), is incorporated herein by reference and is on file with the Department and the Office of the Secretary of State. In addition, local government owners and operators shall comply with 1 or more of the following:

Arizona Administrative Register
Notices of Final Rulemaking

III. GENERAL COMMENTS AND RESPONSES

COMMENT: We commend the Department's efforts to involve the regulated community, EPA, and other stakeholders in round table sessions to further develop the draft rules. We appreciate your efforts to work with us towards approval of Arizona's program.

RESPONSE: The Department appreciates the comment.

COMMENT: We wholeheartedly support these proposed regulations and greatly appreciate the Department's reliance on readily-available published industry standards in promulgating these regulations.

RESPONSE: The Department appreciates the comment.

IV. SPECIFIC COMMENTS AND RESPONSES

R18-12-101(19) Contamination

COMMENT: This definition is extremely broad, encompassing regulated substances in any containers other than USTs (such as aboveground tanks, pipes, tankers, etc.) as well as regulated substances released into the environment.

ANALYSIS: The definition is quite broad; however, the Department believes that the context in which the term is used in the rule provides the reader with a clear understanding of the applicable requirements.

RESPONSE: No change to the rule.

R18-12-101(53) Indian Country

COMMENT: Please note that at the time of application for federal authorization, the state should clarify the purpose of this definition and provide a description of the state's authority, if any, over Indian lands.

ANALYSIS: So noted.

RESPONSE: No change to the rule.

R18-12-101(60) Maintenance

COMMENT: The definition of this term varies from the federal definition in 40 CFR 280.12 in 3 ways, potentially resulting in lesser stringency. First, the phrase "those actions reasonably necessary" is ambiguous. Second, the definition lacks reference to prevention of releases of regulated substances, which is the purpose of the operating and maintenance requirements specified in 40 CFR 280 Subpart C (280.30 through 280.34) and in R18-12-230 through R18-12-234. Third, the phrase "tanks, piping and ancillary equipment" is used in place of "underground storage tank system," but is not equivalent to the federal definition because it does not include "containment system," as is the case in the definition of "UST system" in 40 CFR 280.12 and in R18-12-103. Please revise this provision to exclude the word "reasonably"; explicitly state the prevention of releases of regulated substances as the reason for ensuring "the proper working condition" of UST systems; and add "containment systems" to the phrase "tanks, piping, and ancillary equipment."

ANALYSIS: In order to avoid some of the inherent vagueness associated with the federal definition, the Department sought to utilize more coherent terms. In order to further the intention of the definition and to remove any lingering confusion, the Department has decided to amend this definition in accordance with the comments to be less ambiguous and to more precisely address the meaning of maintenance. Further, the federal definition misses the point of ensuring the system to be maintained in working condition. The basic objective (standards specified in R18-12-211, R18-12-220, and R18-12-221) of a UST system is to contain regulated substances and control the removal of those substances from the system. The word "reasonably" has been removed and the defined term "UST system" has been substituted for the description contained in proposal.

RESPONSE: The rule is revised as follows:

60. "Maintenance" means those actions ~~reasonably~~ necessary to ensure the proper working condition of an UST system tanks, piping and ancillary equipment.

R18-12-101(61) Motor Fuel

COMMENT: The proposed rules do not reference the statutory definition for the term "motor fuel," necessary for the definition of "noncommercial purposes."

ANALYSIS: The proposed rules define the term "Motor vehicle fuel" which is exclusively used in Article 4 (UST Excise Tax). The commenter is referring to the statutory definition of "Motor fuel" which is set forth at A.R.S. § 49-1001(6). The Department has not provided a cross-reference to all statutory definitions in the rule, but has only provided those which have impact of maximum significance and have caused confusion on the part of the regulated community.

RESPONSE: No change to the rule.

R18-12-101(64) On the Premises Where Stored

COMMENT: The term "tanks" is used rather than the defined terms. ADEQ may also wish to clarify that the premises where stored refers to the property, rather than the USTs, to avoid a construction issue present in the federal regulations.

ANALYSIS: This definition needs revision. The Department followed the EPA error in having "premises" mean a UST system

Notices of Final Rulemaking

and including references to tank and usage which are covered in the statutory definition of "Underground storage tank" at A.R.S. § 49-1001(17)(b). A.R.S. § 49-1001(17) is defined as follows: "Underground storage tank does not mean any of the following: * * (b) A tank used for storing heating oil for consumptive use on the premises where stored."

RESPONSE: The real definition of this term is confined to property and R18-12-101(64) is therefore, revised as follows:

64. "On the premises where stored" means, with respect to A.R.S. § 49-1001(17)(b) only, ~~tanks located on~~ a single parcel of property or any contiguous or adjacent parcels of property ~~where the stored heating oil is used.~~

R18-12-101 (97), (100) Underground Storage Tank, UST

COMMENT: Providing definitions for these terms is very useful. However, the proposed rules do not consistently use "underground storage tank" or "UST," sometimes referring to "tank"-an undefined term-instead (See, e.g., R18-12-101.64, R18-12-241). We suggest that the proposed rules consistently use the defined term.

ANALYSIS: The word "tank" as defined in statute, is appropriately used instead of "Tank system" in certain parts of the rule where requirements apply specifically to the tank part of the system. The Department has reviewed the rule text to ensure proper usage. The commenter's reference to definition 64. "On the premises where stored" has been corrected (see comment above) and a review of R18-12-241 reveals no difference in usage than found in the federal rule.

RESPONSE: No change to the rule.

R18-12-101

COMMENT: The proposed rules do not provide a definition for the term "occurrence"; see 40 CFR 280.92.

ANALYSIS: The term "Occurrence" is defined at Arizona Revised Statutes (A.R.S.) Title 49, Chapter 6, § 49-1001(7).

RESPONSE: No change to the rule.

R18-12-101

COMMENT: The proposed rules do not provide definitions for the terms "site" or "UST Site," which are used in various places instead of excavation zone or other terms found in the federal regulations. ADEQ should define these terms to alleviate the resulting problems of vagueness. See, for example, R18-12-243(E).

ANALYSIS: The Department has taken every opportunity to clarify the rule text by defining terms. However, those terms which are commonly use and clear in context have not been added to the list of over 100 terms already defined. The federal rule lacks consistency as respects use of the term site or off-site. Frequently, it is preceded by UST, but just as often, the identifier is omitted. This rule, as in the federal rule, has relied on the context to eliminate any confusion over intent.

RESPONSE: To ensure clarity, the rule text has been fully reviewed and where the location of the site subject to the requirement is in question, a specific designation has been added. The revised rule is as follows:

R18-12-222

C. In addition to the information required in subsection (B) of this Section, where an UST system is permanently closed, temporarily closed, or where a change-in-service has occurred, an owner shall provide all of the following:

* * *

4. Whether a UST site assessment was completed.

R18-12-222. Notification Requirements

COMMENT: Since the state is proposing to require owners to submit Notification Forms in lieu of the forms set forth in Appendix I of 40 CFR Subpart B, the State's Notification Form must meet the requirements of RCRA § 9002 per CFR 280.222(b). These requirements are met with the exception of 1 item: that in notifying the State, the owner must specify the age of the tank. Subsection R18-12-222(B) requires only that the owner include on the Notification Form the "date of the UST system installation" (subsection (11)), which is not necessarily the age of the tank. Please revise this subsection to require that the age of the tank be specified on the State's Notification Form. The proposed rule should clarify that separate notices are required for tank systems located at different facilities. See 40 CFR 280.22(c). The proposed rule should also clarify that it is the responsibility of an owners to ensure compliance, although only 1 owner need submit the requisite forms.

ANALYSIS: The Department does not feel that the age of the tank is a useful piece of information and, therefore, does not require such information. The tank, no matter the age, must meet the technical requirements for new tanks upon installation (R18-12-220) or upgrade of existing system (R18-12-221). However, the rule has been revised to add the date when the system came into operation because that is the date when the system became a UST system. The rule is further revised to clarify that a separate notification is required for each facility.

RESPONSE: R18-12-222(B) is revised as follows:

- B. An owner shall submit the most current and complete information on each UST system at each facility utilizing the Departmental form titled "Notification for Underground Storage Tanks" ("Notification Form"). An owner shall submit a separate Notification Form to the Department for each facility which is owned. Submitted information shall include all

of the following for each UST system:

* * *

11. Date of the UST system installation and date the UST system was 1st brought into operation.

R18-12-231(C). Operation and Maintenance of Corrosion Protection

COMMENT: This provision does not address situations in which faulty design specifications cause corrosion protection failures.

ANALYSIS: The proper subject of R18-12-231, as well as of 40 CFR 280.31, is maintenance of corrosion protection. Construction and design requirements are established in R18-12-220 and R18-12-221. The Department has used the phrase "operating in accordance with its design specifications" to clarify the meaning of the ambiguous term "running properly" which appears in the federal rule (40 CFR 280.31(c)).

RESPONSE: No change to the rule.

R18-12-234. Reporting and Recordkeeping

COMMENT: This Section specifies requirements for reporting, recordkeeping, and availability and maintenance of records per 40 CFR 280.34. However, this Section does not address the obligations of owners and operators under RCRA § 9005 to, upon request of a representative of the state, furnish information related to regulated USTs, permit access to and copy all records relating to regulated USTs; and permit inspections, obtaining of samples, monitoring or testing of the UST system, and corrective action. These provisions need not necessarily be included here, as they are in the federal regulations, but will be required for program approval.

ANALYSIS: The subject provisions of the comment are found at A.R.S. § 49-1011. The rule and program approval are, at this point, separate subjects.

RESPONSE: No change to the rule.

R18-12-241(A)(2)

COMMENT: Please note that reporting of confirmed releases will have to be addressed, either here or in some other provision, with regard to corrective action. See 40 CFR 280.342(a)(2) and 280.60 et seq.

ANALYSIS: The release reporting provision is found at R18-12-240(B).

RESPONSE: No change to the rule.

R18-12-241(A)(2)

COMMENT: We suggest the following alternative language to clarify:

- a. An UST system that does not meet the performance standards in R18-12-220 or R18-12-221 may still be operated until December 22, 1998, provided that the owner or operator conducts both annual tank tightness testing and either monthly inventory control or manual tank gauging. Annual tank testing shall be conducted in accordance with R18-12-243(C), and the initial tank tightness test shall be performed on or before the compliance date for the UST as set forth in R18-12-240(C). Monthly inventory control, if used, shall be conducted in accordance with R18-12-243(A). Manual tank gauging, if used, shall be conducted in accordance with R18-12-243(B).
- b. As of December 22, 1998, UST systems that do not meet the performance standards in R18-12-220 or R18-12-221 shall either be upgraded under R18-12-221 or permanently closed under R18-12-271 through R18-12-274."

ANALYSIS: The Department does not feel that the suggested revision provides any substantive improvement of the rule. A revision of this nature would require extensive unnecessary explanation to the EPA at the time of application for State Program Approval under A.R.S. § 49-1014.

RESPONSE: No change to the rule.

R18-12-243(A)(2) and (B)(3)

COMMENT: We suggest that, for sake of clarity, the implicit intent of the federal regulations that the equipment must be capable of, *and be used to*, measure to the specified standard be explicitly stated in this provision.

ANALYSIS: In order to be consistent with, and no more stringent than, the federal rules, the Department has attempted to express its rule text as similar to the federal rules as practicable. The provisions of R18-12-243(A)(2) are identical to the federal rule, except that, for clarity, "the regulated substance" was used instead of "product" (this change was used primarily to allow this method for systems which contain "non-virgin" regulated substances) and "vertical dimension" was used in place of height (this change was made for accuracy). The intent of the Department and that of EPA are equally expressed.

RESPONSE: No change to the rule.

R18-12-243(A)(4) Vapor Monitoring

COMMENT: The proposed rules must require that deliveries, as well as measurements, be performed through a drop tube, in order to prevent dangerous electrical conditions.

Notices of Final Rulemaking

ANALYSIS: The reference to vapor monitoring is incorrect. The provisions of R18-12-243(A)(4) of the proposed rule address measurement as that is the critical part of inventory control methodology. Although the federal rule does not address accurate measurement, other than the increments of the dip stick, it does discuss deliveries.

RESPONSE: To encompass both requirements (accuracy and safety), R18-12-243(A)(4) is revised as follows:

4. Measurements, as well as deliveries of regulated substances, are made through a drop tube that extends to within 1 foot of the tank bottom.

R18-12-243(E), (F), and (G)

COMMENT: Numerous comments were received regarding the vapor monitoring requirements, interstitial monitoring, and associated ground water monitoring. These comments are combined and divided into 4 major categories:

1. Locating the vapor monitoring wells within the excavation zone: several comments were submitted which suggested that the rules be amended to require the placement of the monitoring wells within the excavation zone.

ANALYSIS: The Department is convinced and EPA agrees that the main purpose of this regulation is to detect a release from the system within 30 days. Moreover, EPA has since agreed with the Department that as long as the monitoring well can detect the release within 30 days, it does not have to be within the excavation zone. The Department is concerned that forcing the placement of a vapor monitoring well within the excavation zone may result in the puncture of the tank by the driller, or effectively removing this option from virtually all existing tanks for fear of puncturing the tank and having a release. The rules as written allow the regulated party to place a monitoring well within the excavation zone or any other location at the UST site such that the monitoring well can detect a release from the tank system within 30 days. Therefore, the Department is no more stringent than, and consistent with, the federal regulations.

RESPONSE: No change to the rule.

2. The rules lack reference to site assessment as the basis for establishing the number and positioning of wells.

ANALYSIS: The Department concurs and revises the text of the rule to include subsections R18-12-243(E)(2) through (8) and R18-12-243(F)(2) through (9). Additionally, the Department has removed the reference to excavation zone at R18-12-243(E)(6) and replaced it with the phrase "at the site."

RESPONSE: The rule is revised as follows:

R18-12-243(E)

- E. Testing or monitoring for vapors within the soil gas of the excavation zone used to meet the requirements of R18-12-241 shall be conducted at least monthly and shall meet all of the following requirements:

1. The characteristics of the site are assessed to ensure that the leak detection method will comply with the requirements in subsections (E)(2) ~~(3)~~ through ~~(8)~~ ~~(6)~~;

R18-12-243(F)

- F. Testing or monitoring for liquids on the groundwater used to meet the requirements of R18-12-241 shall be conducted monthly and meet the following requirements:

1. The characteristics of the site are assessed to ensure that the leak detection method will comply with the requirements in subsections (F)(2) ~~(3)~~ through ~~(9)~~ ~~(6)~~;

R18-12-243(E)(6)

6. The level of background contamination at the site ~~in the excavation zone~~ will not interfere with the method used to detect releases from the tank system;
- 3) The rule fails to address that the detection of a release must be made by the release detection devices located in the excavation zone.

ANALYSIS: The Department concurs with that portion of the comment which concludes that the rule, as written, fails to reference the monitoring device as the entity "detecting" a release within 30 days. However, the Department disagrees with the comment as regards the constraining of the location of the monitoring device within the excavation zone. See the above analysis for more detail on the excavation zone comment.

RESPONSE: The rule is revised as follows:

R18-12-243(E)

3. The stored regulated substance, or a tracer compound placed in the UST system, will produce a vapor level that is detectable by the monitoring devices in the monitoring wells, within 30 days from the date of commencement of a release from the UST system;
5. The ground water, rainfall, soil moisture or other known interferences will not render the measurement of vapors by the monitoring device inoperable so that a release could go undetected by the monitoring devices in the monitoring wells for more than 30 days from the date of commencement of the release from the UST system;

Notices of Final Rulemaking

4. Commenter has suggested that the Department add language to R18-12-243(E)(1) and (G)(2)(e) limiting the assessment of the UST site to the excavation zone.

ANALYSIS: The Department concurs with the EPA's comment which states "the objective of the federal rule is to assess the site as a whole." In order to assess the site as a whole, it is important for the regulated party to properly assess the characteristics of the site. The comment suggests limiting the assessment to the excavation zone. The Department disagrees with this inconsistent federal approach. In order to assess the site, the native soil, not merely the excavation zone needs to be assessed. To limit the assessment to the excavation zone would inhibit the proper assessment of the "site as a whole." The Department herein takes this opportunity to modify the language of R18-12-243(G)(2)(e) so that it is consistent with R18-12-243(E)(1).

RESPONSE: The rule is revised as follows:

R18-12-243(G)

2. For UST systems with a secondary barrier within the excavation zone, characteristics of the site and system components shall be designed and constructed to detect a release between the UST system and the secondary barrier and shall meet all of the following requirements:

* * *

- e. The ~~site~~ characteristics ~~of the UST site are assessed to~~ ensure that the secondary barrier is always above the groundwater and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions.

R18-12-243(G)(2)(a)

COMMENT: We acknowledge that this provision has been changed to explicitly require that the secondary baffler must be constructed of impermeable material (at least 10^{-6} 11 cm/sec for the regulated substances stored). However, the provision contains a typographical error in the form of a strikeout through the words "...substance. The rate of permeability shall not exceed 10^{-6} ..."

RESPONSE: The typographical error has been corrected.

R18-12-245

COMMENT: The proposed rules should specify the commencement time for the retention periods, differentiating between circumstances in which releases did or did not occur.

ANALYSIS: The comment is correct as respects the need for a "start" date for the retention period; however, the text of the federal rule, at §280.45, does not refer to the occurrence of a release.

RESPONSE: The establishment of commencement periods should be self-evident; however, for clarity, R18-12-245(A) is revised as follows:

R18-12-245

- A. Owners and operators shall maintain records in accordance with R18-12-234 demonstrating compliance with all applicable requirements of R18-12-240 through R18-12-244. The following records shall be maintained for the operational life of the release detection system or 5 years from the date indicated below, whichever is the shorter time period:
1. All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or the installer. The retention period shall start at the date of installation.
 2. Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site. The retention period shall start at the date of completion of the servicing work.
- B. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be maintained for at least 5 years from the date of installation.
- C. Except as otherwise provided in subsection (D), the results of any sampling or testing shall be maintained for at least 5 years from the date of receipt by owners and operators of the results.
- D. The results of tank tightness testing conducted in accordance with R18-12-243(C) shall be retained from the date of receipt by owners and operators of the results until the next test is conducted and the results of that test are received.
- E. Results of any monitoring shall be maintained for at least 1 year from the date of receipt by owners and operators of the monitoring results.

R18-12-270

COMMENT: Please revise this provision to explicitly state that release reporting and release response provisions remain applicable during temporary closure. Either R18-12-274 or 40 CFR 280 Subparts E and F should be referenced in this Section.

ANALYSIS: R18-12-274 requires that any release or suspected release detected during temporary closure or permanent closure be reported. This methodology was specifically used to avoid the requirement being lost (as was indicated by members of the regulated community) under the federal construction.

Notices of Final Rulemaking

RESPONSE: In order to further reinforce the release reporting requirement during temporary closure, R18-12-270(B) is revised as follows:

- B. Owners and operators of a temporarily closed UST system shall continue operation and maintenance of corrosion protection in accordance with R18-12-231, and release detection in accordance with R18-12-240 through R18-12-245. Discovery of a release or suspected release shall be subject to the provisions of R18-12-274. Release detection is not required if the temporarily closed UST system is emptied of all regulated substances and accumulated residues. The UST system is empty when all contents have been removed from the system so that no more than 2.5 centimeters (1 inch) of residue or 0.3% by weight of the total capacity of the UST system remains in the system. Spill and overfill requirements in accordance with R18-12-220(D), R18-12-221(E) and R18-12-230 do not have to be met during temporary closure.

R18-12-270(C)

COMMENT: For the benefit of the regulated community, we suggest that this subsection clarify at what point during the 1st 3 months of temporary closure the requirements in subsections (C)(1) and (2) must be met.

ANALYSIS: Requiring compliance prior to the deadline for compliance is illogical.

RESPONSE: To provide a more clear requirement, R18-12-270(C) is revised as follows:

- C. Owners and operators of any UST system which is temporarily closed ~~If the temporary closure of an UST system is to be for 3 months or more, owners and operators shall also comply with both of the following requirements before the end of the 3rd month following the date on which the UST system began temporary closure:~~

R18-12-270(E)

COMMENT: The proposed rule is not clear as to when the actions described in subsections (E)(1) and (2) are to take place.

ANALYSIS: The commenter is correct as respects R18-12-270(E)(1); the provision for permanent closure does not have a time restriction.

RESPONSE: R18-12-270(E) is revised as follows:

- E. Any temporarily closed UST system that cannot be brought back into service within 12 months from the date it went into temporary closure, must comply with 1 of the following before the expiration of the 12-month period ~~When an UST system is temporarily closed for more than twelve months, owners and operators shall have either:~~

R18-12-270(E)

COMMENT: If you offer an extension it would be in conflict with the fire code. The fire code mandates that tanks out of service be permanently closed within 1 year. This could cause conflict between the 2 jurisdictions. If you grant a variance and we don't or vice-versa it could cause some conflict.

ANALYSIS: The statutory provisions under which the closure requirements of this rule are promulgated (A.R.S. § 49-1008) require that the rule be consistent with the provisions of the federal UST rule. The Department cannot meet this statutory requirement and eliminate extensions of the period of temporary closure. The conflict between the Uniform Fire Code (UFC) and the federal UST rule has existed since the EPA rule was finalized in 1988. Where the UFC mandates a requirement which is more stringent than the UST rule, the UFC will prevail.

RESPONSE: No change to the rule.

R18-12-270(F)

COMMENT: While the federal regulations do not address extensions of temporary closure, we recommend that subsection (2) of this subsection explicitly state that the leak detection system must indicate that no release has occurred. Otherwise, this requirement could be interpreted as being met by a properly installed and maintained leak detection system, regardless of whether a release occurred and was detected by the system.

ANALYSIS: The commenter is confusing the requirements for securing an extension of temporary closure with release reporting and corrective action. An extension without a site assessment may be granted where 1 of the specified external leak detection systems is properly in place. Release reporting, etc. requirements have been added to subsection (A) as well as being in the proposed R18-12-274. The Department has tried to maintain logic in the subject matter being addressed. The Department did not include language limiting temporary closure to cases where no release has occurred because even if there is a release, the department can still give an extension if all requirements are met.

RESPONSE: No change to the rule.

R18-12-271(B)

COMMENT: The proposed rule should clarify that the notice shall be waived only if notice has otherwise been provided in accordance with the corrective action requirements. Please clarify the intent of the reference to a "request" in subsection (2).

ANALYSIS: As "corrective action" is not specifically defined in this Section, a reference to A.R.S. §§ 49-1004 and 49-1005 have been included as well as a further clarification of "request" in R18-12-271(B)(2).

Arizona Administrative Register
Notices of Final Rulemaking

RESPONSE: R18-12-271(B) is revised as follows:

- B. The Department shall waive the 30 day notice described in subsection (A) if the permanent closure is in response to a corrective action conducted under A.R.S. § 49-1005 which was reported under A.R.S. § 49-1004. In addition, the Department may determine another reasonable time period for the notice of intent to permanently close or make a change in service to the UST system if any of the following exist:
1. An emergency that threatens human health, or the environment.
 2. The Department agrees to a request made by an entity operating under an Intergovernmental Agreement with the Department delegating closure inspection authority.
 3. The Department establishes another reasonable time period.

R18-12-271(D)

COMMENT: In this subsection, the State requires owners and operators to submit closure reports to the Department. The federal provision for closure records in 40 CFR 280.74 requires that the results of the excavation zone assessment be maintained for at least 3 years after completion of permanent closure or change-in-service. If closure records are to be maintained solely by the Department, please add to this subsection the Department's obligation to hold such records for at least 3 years per 40 CFR 280.74(c).

ANALYSIS: The federal rule does provide at 40 CFR 280.74 for 3-year record retention by the implementing agency if they receive site assessment records. As the Department requires closure records to be submitted, consistency requires the Department maintain the records for that period.

RESPONSE: R18-12-271(D) is revised as follows:

- D. Owners and operators who permanently close or make a change-in-service of an UST system shall prepare a closure report in a format provided by the Department. The closure report shall be submitted to the Department within 30 days of the completion of closure or change-in-service. The report shall be maintained by the Department for at least 3 years from the date of receipt as evidenced by the post mark or the date stamped on the document by the Department. The report shall demonstrate compliance with the requirements of this Section and R18-12-272. In addition, the report shall include all of the following:

R18-12-272 and R18-12-180

COMMENT: The intent of the federal requirements in 40 CFR 280.72 for assessing the site at closure or change-in-service is to place responsibility on owners and operators for not only assessing the site but deciding how to assess the site. EPA has not specified in regulation how a site is to be assessed because new approaches to, and techniques for site assessment, sample collection, and sample analysis develop and change over time. The Department may want to consider revising the rules to maintain flexibility. ADEQ is encouraged to allow methods for expedited or accelerated site characterization for purposes of both closure and corrective action.

ANALYSIS: The Department has determined that if clear standards are not set forth in rule, the regulated community and their service providers will be unable to ascertain what constitutes adequacy for system closure. For various reasons, the Department is required to revise rules from time to time and those instances can be utilized to provide for significant developments where validity has been proven.

RESPONSE: No change to the rule.

R18-12-272(A) and R18-12-180(A)(2)

COMMENT: These provisions are restrictive in the use of sample analysis methods by allowing only laboratory analysis. This rule excludes all field analytical methods and could exclude combinations of field and laboratory analytical methods. While the Department may not be prepared to allow field analytical methods at the present time, it may wish to do so in the future. We suggest R18-12-272(A) be revised to read: "...owners and operators shall measure for the presence of a release at the UST site by taking samples for laboratory analysis by approved methods."

ANALYSIS: The Department disagrees. A number of quality assurance/quality control problems arise in the use of field methods to establish compliance determinations. As an example, ASTM D 5314-93 indicates that "the most significant limitation on soil gas monitoring is the inability to utilize the method as a stand alone technique." Because of these problems, field techniques are intentionally excluded as a method for demonstrating whether a release has occurred. The rule does not exclude field techniques for use in determining where sampling for laboratory analysis is most appropriate. If the Department were to implement the suggestion, either standards for field techniques would be required in rule or a method for approvals would have to be set forth. The Department realizes that acceptable methodologies evolve and that the rule will require revision at a later date. Flexibility with regard to analytical methodologies is provided for elsewhere.

RESPONSE: No change to the rule.

R18-12-272(A)

COMMENT: The requirements of this provision are not clear and may be less stringent than the federal requirements in 40 CFR 280.72(a). In subsection (A), samples are required to be taken "where contamination would most likely occur, or where stained

Notices of Final Rulemaking

soils, odors, free product, or other evidence indicates that a release may have occurred." However, the samples referred to in subsection (A) must be taken "...according to..." Subsections (A)(2) which specifies exact sample locations in relation to the position (or former position) of the UST system and/or presence of water. Therefore, subsections (A) and (A)(2) are inconsistent and present an unclear course of action for owners and operators in terms of whether (1) any samples in addition to those required in R18-12-272(A)(2) are also required; (2) additional samples are also subject to the requirements of R18-12-280; and (3) independent decisions on sample locations in addition to locations specified in subsections (A)(2) are allowed. Furthermore, the choice available to the owners and operators is not where contamination is most likely to be present or where signs of release are obvious, the signs of release are a factor to be considered in making the decision of where contamination is most likely to be present. The federal requirements specify that several factors in addition to immediate evidence of contamination (for example, stained soils, odors, free product) must be considered when selecting not only sample locations but sample types and measurement methods. These factors are: (1) methods of closure; (2) the nature of the stored substance; (3) the type of backfill; (4) the depth to ground water; and (5) other factors appropriate for identifying the presence of a release. We suggest that the language be changed to read: "Samples shall be obtained in the areas where contamination would most likely occur, or for example where stained soils, odors, free product, or other evidence indicates that a release may have occurred." Please also revise subsection R18-272(A) to include the requirements in 40 CFR 280.72.

ANALYSIS: The Department agrees with the commenter's suggestion that R18-12-272(A)(2) should be amended to include more precise direction. However, the Department declines the commenter's proffered amended language in favor of more explicative language.

RESPONSE: R18-12-272(A)(2) is revised as follows:

2. Specific locations for the required sampling at the UST system site shall be determined by the presence of stained soils, odors, vapors, free product, or other evidence indicating that a release may have occurred. In selecting sample types, sample locations, and measurement methods, owners and operators shall also consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors which may identify the presence of a release. At a minimum, each site shall be sampled in accordance with the following:

R18-12-272(A)(1)

COMMENT: The rules do not specify the presence of vapors as 1 of the environmental conditions to be documented. Requiring only "...samples of native soil, and of water..." is less stringent than the requirements in 40 CFR 280.72(a) ("owners and operators must measure for the presence of a release" including vapor releases), and may have the effect of limiting the application of the definition of "release" in A.R.S. § 49-1001-14.

ANALYSIS: The appropriate location for the documentation requirements addressed in this comment is in R18-12-271(D) where the closure report content is set forth. Since R18-12-272(A)(1) is affected by the requirements of R18-12-271(D) the Department will answer this comment by amending R18-12-271(D)(2).

RESPONSE: Accordingly, R18-12-271(D)(2) is revised as follows:

2. Information concerning the required soil sampling, conducted in accordance with ~~R18-12-272~~ R18-12-280, which shall include the rationale for selecting sample types, sample locations, and measurement methods and, for each sample, all of the following: sample location identification number; sample depth; sampling date; date of laboratory analysis; lithology of sample; field soil vapor readings, if obtained; analytical methods used; laboratory results; and numerical detection limits. In addition, all sampling quality assurance and quality control results.

R18-12-280(A)(1)

COMMENT: The specified extraction methods could limit the Department in the future if better methods are developed.

ANALYSIS: The method of analysis must be approved by the Department of Health Services (ADHS). ADHS is responsible for determination of acceptable methodologies. As methodologies evolve, ADHS rules will be revised to include those which have demonstrated accuracy for specified substances. Also, those rules will contain acceptable methods of extraction.

This rule has been delayed for over 6 years due in part to the "wait for new developments." This Article will be revised late in 1996 to provide for release reporting and corrective action. Necessary changes may be made at that time. The proposed rules are in accordance with nationally recognized standards for collection and extraction of VOCs. The actual amount of time allowed between collection and extraction is controversial. The 72-hour extraction time provided for in the rule is a compromise position until either EPA or ADHS proposes more stringent requirements.

RESPONSE: No change to the rule.

R18-12-280(A)

COMMENT: In subsection (A)(1)(a) the extraction requirement of 72 hours has been referred to. The extraction is a methanol immersion extraction. Therefore subsection (A)(1)(b) is a repeat of (a) unless (b) is referring to the field methanol immersion which is required within 2 hours. Please clarify these Sections.

ANALYSIS: The commenter is correct with respect to laboratory and field extraction. Also, the reference to the adaptor is incorrectly placed in an area designated as addressing extraction. Further, to provide for other procedures which may be appropriate in unique situations, an additional subsection has been added. Finally, a clarification has been made that the specified extraction times are to be utilized unless the analytical method directs a shorter time period.

Arizona Administrative Register
Notices of Final Rulemaking

RESPONSE: R18-12-280(A)(1) is revised as follows:

1. Samples shall be analyzed for the components of the regulated substances stored in the UST during its operational life by analytical test methods that are approved in accordance with A.A.C. R9-14-601 through R9-14-617 except that soil samples which are to be analyzed for the possible presence of volatile regulated substances shall be subject to 1 of the following ~~extraction~~ procedures unless a shorter extraction time is otherwise specified by the analytical method:
 - a. Laboratory extraction ~~Extraction~~ occurs within 72 hours of collection, unless site-specific pre-approval to extend the time to 120 hours has been granted by the Department.
 - b. Field extraction ~~Extraction~~ is made using methanol immersion; ~~static headspace, or~~
 - c. A purge and trap modified adapters is used.
 - d. The Department may approve, prior to obtaining samples, other procedures which have been determined by the Department to result in analytical data representative of the concentrations and compositions of volatile regulated substances actually present in the soil.

R18-12-280(A)(1)(a) and (b)

COMMENT: Providing the option in the rulemaking for laboratory extraction within 72 hours or field methanol immersion will be the best. This will reduce costs and give the environmental professional the ability to make decisions on analytical procedures based upon site specifics.

ANALYSIS: This was the intent of the Department. The revisions to R18-12-280(A)(1) should provide the needed clarification.

RESPONSE: See R18-12-280(A) above.

R18-12-280(A)(1)(a) and (b)

COMMENT: More specific guidance is required for how the quality control (QC) data should be handled by the laboratories. Duplicate samples which are required for QC have different weights. This means that the recovery for duplicate matrix spikes is a comparison between 2 different sample sizes and is not a true duplicate. The subcoring devices which have been proposed do not provide very good replication and sample weights vary considerably.

ANALYSIS: The commenter has pointed out an inconsistency in the rule. As the Department is not prepared to address laboratory quality assurance/quality control requirements for all sampling strategies in this rule, the provisions addressing methanol extraction (R18-12-280(B)(3)) are removed and the chain of custody requirements are redesignated from R18-12-280(B)(4) to R18-12-280(B)(3).

RESPONSE: The Section is revised as follows:

R18-12-280(B)

3. ~~If methanol extraction is to be performed in the field, 1 methanol trip blank is required for each period of time during which samples are taken consecutively. The trip blank shall be subject to all of the requirements for samples taken during the sampling period.~~
4. Chain-of-custody procedures shall be followed, in accordance with subsection R18-12-281(S), for all sampling. In addition, condition and temperature of the samples as received by the laboratory shall be included on the chain of custody record.

R18-12-280(C)-Several comments were made addressing this Section. Each comment is noted and analyzed, however, because these comments result in the organizational change of the subsection the Response is provided at the end of the appropriate comments.

COMMENT: Especially with substances such as oil, regular motor oil, and some other of the non-volatile or low-volatile materials. I think this should be an option, you should be able to use the glass jars.

ANALYSIS: The Department does not agree that this rule restricts site assessments to volatile constituents. The Department did not intend to require that all sampling must utilize specified equipment. R18-12-280(A)(1) clearly establishes that the specified procedures apply only to VOCs and are an exception to the requirement for all substances to be sampled. That exception is applicable only where either the method of extraction is not established or, if it is established, is in concurrence with the rule designated procedures.

RESPONSE: Subsection (C) does appear restrictive and is revised in accordance with the comments below:

R18-12-280(A)(1) and (C)

COMMENT: A site assessment is not necessarily limited to investigation of "volatile" regulated substances.

RESPONSE: See response to comment below:

R18-12-280(C)

COMMENT: EPA follows the protocol in SW-846, Volume II, Chapter 9 for sampling stockpiles, which specifies that a 3-dimen-

Notices of Final Rulemaking

sional grid system be established for purposes of random sampling. The Department may wish to include this provision or reference the EPA protocol.

ANALYSIS: The Department agrees that the protocols in SW-846, Volume III, Chapter 9 for soil sampling should be adopted. For the sake of clarification, there are 3 general sampling strategies discussed in Chapter 9, 1 of which uses a sample grid. Placement of the soil stockpile standards within the context of VOC sampling is confusing. Additionally, the rule addresses petroleum contaminated soil through 272(A)(4) which refers to the Arizona special waste statutes. Rules under these statutes, at R18-8-1604, require sampling in accordance with SW-846. To simplify this rule, conform to the special waste rules regarding sampling of petroleum contaminated soils, and address this comment, R18-12-272(A)(4) and R18-12-280(C)(2) are deleted and, to provide a general standard for sampling of all excavated soils, R18-12-272(A)(2)(g) has been redesignated as R18-12-272(A)(2)(f) (see item 2 in subsection (A) (Changes Initiated By The Department)).

RESPONSE: The rule is revised as follows:

R18-12-272(A)(4)

4. ~~Excavated petroleum contaminated soils shall be handled in accordance with A.R.S. Title 49, Chapter 4, Article 9 and the rules promulgated thereunder.~~

R18-12-280(C)

- C. ~~All soil sampling samples required under R18-12-272 shall be conducted in accordance with R18-12-281(R)(2). Where regulated substances stored in the UST system at any time during the life of the system include volatile regulated substances, samples shall be obtained with minimal loss of volatile regulated substances in accordance with R18-12-281(R)(1). Samples of volatile regulated substances obtained through excavation shall be collected by driving a clean metal ring, metal cylinder, or a sleeve which is composed of an inert material such as Teflon, stainless steel, or brass into the center of the soil in the backhoe or trackhoe bucket immediately after the soil is lifted from the bottom of the excavation. The Department may approve, prior to obtaining samples, other procedures for sampling which have been determined by the Department to result in analytical data representative of the concentrations and compositions of volatile regulated substances actually present in the soil. All soil samples shall be obtained in accordance with the following:~~

1. ~~Samples obtained through excavation shall be collected by driving a clean metal ring, metal cylinder, or a sleeve which is composed of an inert material such as Teflon, stainless steel, or brass into the center of the soil in the backhoe or trackhoe bucket immediately after the soil is lifted from the bottom of the excavation.~~
2. ~~Stockpiled excavated soil shall be sampled by collecting discrete samples at randomly selected locations within the designated portion of the stockpile. The samples shall be individually analyzed and the results averaged to determine the representative contaminant concentrations for the stockpile or the sub-division of the stockpile. The number of samples to be collected shall be determined in accordance with the following table:~~

Soil Volume (cubic yards)	Number of Samples
less than 10	2, 1 from each half of the stockpile
11-20	3, 1 from each 3rd of the stockpile
21-100	4, 1 from each quarter of the stockpile
101-500	Sub-divide the stockpile into 100 cubic yard sections and sample accordingly.
Quantities greater than 500	Contact the Department for sampling instructions.

R18-12-272(A)(2)

- g f. ~~Stockpiled excavated soil shall be sampled in accordance with A.R.S. Title 49, Chapter 4, Article 9 and the rules promulgated thereunder R18-12-280(C)(2).~~

R18-12-280(A)(2)

COMMENT: Concern is expressed over the time constraints a 72-hour extraction time will have on the regulated party. At present some laboratory contracts call for a 5-day extraction time; it would cost extra to have the samples extracted within the mandated 72 hours.

ANALYSIS: A number of studies have been performed that quantify VOC losses inherent in conventional soil sampling methodologies. These methodologies are subject to systematic error (in other words, soil disturbance during sampling, container head-space volume, leakage through soiled container threads, deficient sample preservation procedures, and too long (but acceptable under current requirements) pre-analytical holding times) all of which can result in under-reporting of VOC concentrations by as much as 100%. Therefore, the 72-hour extraction time was a compromise reached between the ADEQ UST Section and the service provider community.

RESPONSE: No change to the rule.

Notices of Final Rulemaking

R18-12-301(D)

COMMENT: This provision is unclear as to whether the alternative records site is in addition to, or in place of, the requirement to maintain records at the facility or the owners' and operators' places of work. The proposed rule should clarify that all records must be made available to ADEQ upon request, regardless of the location at which the regulations are maintained.

ANALYSIS: The provisions of R18-12-301(D) are confusing due to a word processing error and have been revised. The same wording which appears in Article 2 (R18-12-234(C)(2)) is used.

RESPONSE: R18-12-301(D) is revised as follows:

- D. Owners and operators shall maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this Article for an underground storage tank until released from the requirements of this Article under R18-12-323. Owners and operators shall maintain such evidence at the underground storage tank site or ~~the owners and operators place of work. Records shall be maintained at~~ a readily available alternative site. Records maintained off-site shall and be provided for inspection to the Department upon request.

R18-12-305(B)(1)

COMMENT: Since the Department will serve as the implementing agency under the proposed rules and under an approved program, we suggest that subsections (a) and (c) be revised to be consistent with subsection (b) in specifying that demonstration of financial responsibility be made to the Department. Additionally, in subsection (c), reference to EPA should be omitted for clarity.

ANALYSIS: In an attempt to maintain accuracy and increase consistency, references to the Department and to EPA have been removed from the provisions of R18-12-305(B)(1)(b) and (c). The commenter's suggested change is not appropriate because the Department does not have primacy, nor is it serving in the capacity of a primacy agency, with respect to Underground Injection Control (40 CFR 144).

RESPONSE: R18-12-305(B)(1)(b) and (c) are revised as follows:

- b. The sum of the corrective action cost estimates, the current closure and post-closure care cost estimates, and amount of liability coverage for which a financial test is used to demonstrate financial responsibility ~~to the Department~~ under R18-8-264.
- c. The sum of current plugging and abandonment cost estimates for which a financial test is used to demonstrate financial responsibility ~~to EPA~~ under 40 CFR 144.63, 40 CFR 144.63, as amended as of July 1, 1994 (and no future editions), is incorporated herein by reference and is on file with the Department of Environmental Quality and the Office of the Secretary of State.

R18-12-305(B)(4)(b)

COMMENT: The language of this provision appears to inadvertently require Dun and Bradstreet to issue particular ratings. We suggest that this language be revised to indicate that the use of this provision is predicated on the company's receipt of a sufficient Dun and Bradstreet rating.

ANALYSIS: The Department does not agree. The rule text is identical to that of the federal rule, except for the substitution of "shall" in the Arizona rule for the "must" in federal text. The wording has been effective and understood in the federal rule since October 26, 1988, and in the Arizona rule since September 21, 1992. The wording of this Section is such that "shall" is referring to the Owners and Operators acquisition of a financial strength rating of 4A or 5A, it does not require Dun and Bradstreet to issue such a rating.

RESPONSE: No change to the rule.

R18-12-308 Surety Bond

COMMENT: The freezing of the reference to the edition of Circular 570 dated June 30, 1995, will result in incorporation of outdated, and potentially improper, information.

ANALYSIS: Under Arizona rule writing requirements, an incorporation by reference must specify the exact edition or date of a document which is incorporated into a rule. Throughout this and all UST rules, specific editions have been shown for codes of practice, CFR parts or sections, etc. This requirement necessitates periodic rule revisions where there are significant changes in documents. The only alternative, in this instance, would be to omit a standard for the sureties issuing performance bonds. This would result in a severe difficulty in securing EPA program approval.

RESPONSE: No change to the rule.

R18-12-310(B) Certificate of Deposit

COMMENT: We suggest that this provision be revised to explicitly state that certificates of deposit do not provide the requisite coverage for 3rd-party liability, and that such coverage must be obtained through alternate mechanisms.

RESPONSE: For clarity and EPA's expressed concern, R18-12-310(B) is revised as follows:

- B. The certificate of deposit may be used for the full required amount of corrective action coverage. Alternatively, it may be used for part of the required amount of corrective action coverage when used in combination with other mechanisms

Notices of Final Rulemaking

allowed under this Article which provide the remaining amount of coverage. In all cases, the full required amount of 3rd-party compensation coverage shall be met with another mechanism or mechanisms allowed under this Article.

R18-12-310(C)(2) Certificate of Deposit

COMMENT: ADEQ may wish to require a signature guarantee in place of, or as an alternative to, the notarization requirement, to enhance the accuracy of the identification of the signatory.

ANALYSIS: For parties utilizing the CD, this rule sets a minimum commonly accepted threshold of notarization. Should lending institutions require a signature guarantee or other means of formalizing the documents, that is something to be resolved between the lender and the owner or operator.

RESPONSE: No change to the rule.

R18-12-311 State Fund or other State Assurance

COMMENT: The language of this provision appears to inadvertently require the Regional Administrator to approve the program. We suggest that this language be revised to indicate that the use of the state fund as a full or partial mechanism is predicated on the approval of the Regional Administrator.

ANALYSIS: The Department does not agree that the rule requires EPA approval of the UST Program. Clearly, only the fund must be approved by the Administrator. R18-12-311(A) has, however, been revised to clarify the coverage and time period during which the fund may be used as follows:

RESPONSE: The rule is revised as follows:

- A. Owners and operators may satisfy the requirements of R18-12-303 by obtaining coverage under an approved state fund which conforms to the requirements of this Section. The state fund shall be approved by a U.S. EPA Regional Administrator as a full or partial mechanism which may be used to meet the requirements of 40 CFR 280.93. The state fund may be used to meet the requirements of this Article only as follows: for facilities within this state which are eligible for coverage; for the amounts and types of coverage costs approved by the U.S. EPA Regional Administrator; and, only until such approval is withdrawn by the EPA Administrator and owners and operators are notified, in accordance with R18-12-319(A)(2), that the fund may no longer be used for compliance with financial responsibility requirements during the term of such approval. 40 CFR 280.93 as amended as of July 1, 1994 (and no future editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.

R18-12-319(A)(2) Cancellation or Nonrenewal by a Provider of Financial Assurance

COMMENT: The restriction of the termination date should be mandatory, not permissive; we believe under Arizona rules of construction, the terms "may" should be replaced by "shall" in this provision.

ANALYSIS: The Department attempted to correct the permissive provisions of the federal rule (see 40 CFR 280.109(a)); however, only subsection R18-12-319(A)(1) was revised in the proposal. The commenter is, therefore, correct with respect to subsection (A)(2).

RESPONSE: R18-12-319(A)(2) has been revised as follows:

2. Termination of insurance or risk retention group coverage, or state funded assurance, except for non-payment of premium or misrepresentation by the insured, shall may not occur until 60 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt. Termination for non-payment of premium or misrepresentation by the insured shall may not occur until a minimum of 10 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

R18-12-320(A)

COMMENT: The nature of the evidence required should be specified in this provision.

ANALYSIS: For clarification, the reference to the evidence subject to submission has been included.

RESPONSE: R18-12-320(A) is revised as follows:

- A. ~~In addition to meeting the requirements of R18-12-301, owners~~ Owners and operators shall submit documented evidence of financial responsibility as described under R18-12-301(C) to the Director according to any 1 of the following applicable time frames:

R18-12-324(F)

COMMENT: The provision should include a reference to 3rd-party compensation costs.

ANALYSIS: The Department agrees. The provisions of R18-12-311 were carefully drawn to permit maximum flexibility so that changes in EPA approval status or coverage provisions of state funds would not create a rulemaking crisis.

RESPONSE: R18-12-324(F) is revised as follows:

- F. Within 30 days after receipt of notification that a state fund or other state assurance has become incapable of paying for assured corrective action costs or 3rd-party liability compensation, owners and operators shall obtain alternate financial

Arizona Administrative Register
Notices of Final Rulemaking

assurance.

R18-12-325. Replenishment

COMMENT: If the certificate of deposit is being offered as a mechanism available to owners and operators as a means of meeting the financial responsibility requirements, it should be subject to replenishment or a suitable equivalent such that the full amount of coverage required pursuant to R18-12-303 is maintained.

ANALYSIS: The Department does not agree. The provisions of R18-12-325, just as those of 40 CFR 280.115, only apply to those mechanisms which are supported by a standby trust. As the Certificate of Deposit (R18-12-310) is functionally identical to a fully funded trust (R18-12-312) and does not require a standby trust, the provisions of R18-12-325 do not apply to the Certificate of Deposit.

RESPONSE: No change to the rule.

11. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:
Not applicable.

12. Incorporation by reference and their location in the rules:

ARTICLE 1

R18-12-101(30): American Society for Testing and Materials Standard D-975-94 "Standard Specification for Diesel Fuel Oils", April 15, 1994, Philadelphia, Pennsylvania.

ARTICLE 2

R18-12-281(A): National Association of Corrosion Engineers Standard RP0285-85, "Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems" amended as of 1985, Houston, Texas.

R18-12-281(B)(1): Underwriters Laboratories Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products" July 1983, amended April 1986, March 1987 and May 1991, Northbrook, Illinois.

R18-12-281(B)(2): Underwriters Laboratories of Canada CAN4-S615-M83, "Standard for Reinforced Plastic Underground Tanks for Petroleum Products" February 1983, Scarborough, Ontario, Canada.

R18-12-281(B)(3): American Society for Testing and Materials Standard D4021-86, "Standard Specification for Glass-Fiber Reinforced Polyester Underground Petroleum Storage Tanks" amended July 25, 1986, Philadelphia, Pennsylvania.

R18-12-281(C)(1): Steel Tank Institute, "Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks" amended as of November 1, 1989, Lake Zurich, Illinois.

R18-12-281(C)(2): Underwriters Laboratories Standard 1746, "External Corrosion Protection Systems for Steel Underground Storage Tanks" amended November 7, 1990, Northbrook, Illinois.

R18-12-281(C)(3): Underwriters Laboratories of Canada CAN/ULC-S603.1-92, "Standard for Galvanic Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids" amended as of September 1992 and Underwriters Laboratories of Canada CAN4-S631-M84, "Standard for Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems" amended as of October 1992 Scarborough, Ontario, Canada.

R18-12-281(C)(4): Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids" amended as of August 3, 1990, Northbrook, Illinois.

R18-12-281(D)(2): Steel Tank Institute ACT-100, "Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks" amended as of March 6, 1991, Lake Zurich, Illinois.

R18-12-281(E)(1): Underwriters Laboratories Subject 971, "Standard for NonMetallic Underground Piping for Flammable Liquids" March 17, 1992, Northbrook, Illinois.

R18-12-281(E)(2): Underwriters Laboratories Standard 567, "Pipe Connectors for Flammable and Combustible Liquids and LP Gas" amended as of May 29, 1991, Northbrook, Illinois.

R18-12-281(E)(3): Underwriters Laboratories of Canada Subject C-107C-M1984, "Guide for Glass Fiber Reinforced Plastic Pipe and Fittings for Flammable Liquids" June 1984, Scarborough, Ontario, Canada.

R18-12-281(E)(4): Underwriters Laboratories of Canada Standard CAN/ULC-S633-M90, "Standard for Flexible Underground Hose Connectors for Flammable and Combustible Liquids" amended as of June 1990, Scarborough, Ontario, Canada.

R18-12-281(F)(1): National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code" amended as of August 17, 1990, Quincy, Massachusetts.

R18-12-281(F)(2): American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems" amended as of November 1987, Supplement March 6, 1989, Washington, D.C.

R18-12-281(F)(3): American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping System" amended as of December 1987, Supplement March 6, 1989, Washington, D.C.

R18-12-281(F)(4): National Association of Corrosion Engineers Standard RP0169-92, "Standard Recommended Practice Control of External Corrosion on Underground or Submerged Metallic Piping Systems" 1983, amended as of 1992, Houston, Texas.

R18-12-281(H)(2): Petroleum Equipment Institute Publication PEI/RP100-90, "Recommended Practices for Installation of Underground Liquid Storage Systems" amended as of 1990, Tulsa, Oklahoma.

R18-12-281(H)(3): American National Standards Institute Standard B31.3, "Chemical Plant and Petroleum Refinery Piping" amended as of 1993 with Addenda, and American National Standard Institute Standard B31.4, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols" 1992 edition, New York, New York.

R18-12-281(I)(1): American Petroleum Institute Publication 1631, "Interior Lining of Underground Storage Tanks" amended as of April 1992, October 1995 Addendum, Washington D.C.

R18-12-281(I)(2): National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10-year Life Extension of Existing Steel Underground Storage Tanks By Lining Without the Addition of Cathodic Protection" amended as of September 1988, Cincinnati, Ohio.

R18-12-281(J)(1): National Fire Protection Association Publication 385, "Standard for Tank Vehicles for Flammable and Combustible Liquids" amended as of 1990, Quincy, Massachusetts.

R18-12-281(J)(2): American Petroleum Institute Publication 1621, "Bulk Liquid Stock Control At Retail Outlets" December 1987, Supplement March 6, 1989, Washington, D.C.

R18-12-281(L)(1): American Petroleum Institute Publication 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations" April 1985, Washington, D.C.

R18-12-281(L)(2): American Petroleum Institute Publication 1627, "Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations" August 1986, Washington, D.C.

R18-12-281(M)(2): American Petroleum Institute Publication 2200, "Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines" amended as of April 1983, Washington, D.C.

R18-12-281(N): Fiberglass Petroleum Tank & Piping Institute FPTPI T-90-01 "Remanufacturing of Fiberglass Reinforced Plastic (RFP) Underground Storage Tanks" July 1990, Toledo, Ohio.

R18-12-281(P)(1): American Petroleum Institute Publication 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks" amended as of December 1987, Supplement March 6, 1989, Washington, D.C.

R18-12-281(P)(2): American Petroleum Institute Publication 2015, "Safe Entry and Cleaning Petroleum Storage Tanks" amended as of January 1991, Washington, D.C.

R18-12-281(P)(4): National Institute for Occupational Safety and Health Publication 80-106, "Criteria for a Recommended Standard... Working in Confined Spaces" amended as of December 1979, Washington, D.C.

R18-12-281(Q): American Society for Testing and Materials Standard D 5088-90: "Practice for Decontamination of Field Equipment Used at Nonradioactive Waste Sites" Revised as of June 29, 1990, Philadelphia, Pennsylvania.

R18-12-281(R)(1): American Society for Testing and Materials Standard D 4547-91: "Standard Practice for Sampling Waste and Soils for Volatile Organics" Revised as of August 15, 1991, Philadelphia, Pennsylvania.

R18-12-281(R)(2): American Society for Testing and Materials Standard D 4700-91: "Standard Guide for Soil Sampling from the Vadose Zone" Revised as of July 15, 1991, Philadelphia, Pennsylvania.

R18-12-281(S): American Society for Testing and Materials Standard D 4840-88: "Standard Practice for Sampling Chain of Custody Procedures" Approved June 1988 and published in October 1988, Re-approved as of 1993, Philadelphia, Pennsylvania.

ARTICLE 3

R18-12-300(D): 40 CFR 280.10(b) and (c), as amended as of July 1, 1994, Washington, D.C.

R18-12-301(C): 40 CFR 280.111(b)(11)(i), as amended as of July 1, 1994, Washington, D.C.

R18-12-305(B)(1)(c): 40 CFR 144.63, as amended as of July 1, 1994, Washington, D.C.

R18-12-305(C)(1): 40 CFR 264.147(f)(1), as amended as of July 1, 1994, Washington, D.C.

R18-12-305(D): 40 CFR 280.95(d), as amended as of July 1, 1994, Washington, D.C.

R18-12-306(C): 40 CFR 280.96(c), as amended as of July 1, 1994, Washington, D.C.

R18-12-307(B): 40 CFR 280.97(b)(1) and (2) as amended as of July 1, 1994, Washington, D.C.

R18-12-308(A): Circular 570 of the U.S. Department of the Treasury, Washington, D.C., as amended at 60 FR 34436, June 30, 1995.

R18-12-308(B): 40 CFR 280.98(b) as amended as of July 1, 1994, Washington, D.C.

- R18-12-309(B): 40 CFR 280.99(b) as amended as of July 1, 1994, Washington, D.C.
R18-12-311(A): 40 CFR 280.93 as amended as of July 1, 1994, Washington, D.C.
R18-12-312(B): 40 CFR 280.103(b)(1) and (2), as amended as of July 1, 1994, Washington, D.C.
R18-12-314(D): 40 CFR 280.104(d), as amended as of July 1, 1994, Washington, D.C.
R18-12-314(E): 40 CFR 280.104(e), as amended as of July 1, 1994, Washington, D.C.
R18-12-315(C): 40 CFR 280.105(c) as amended as of July 1, 1994, Washington, D.C.
R18-12-316(D): 40 CFR 280.106(d) as amended as of July 1, 1994, Washington, D.C.
R18-12-316(E): 40 CFR 280.106(e) as amended as of July 1, 1994, Washington, D.C.
R18-12-317(B): 40 CFR 280.107(d) as amended as of July 1, 1994, Washington, D.C.
R18-12-322(B)(2): 40 CFR 280.112(b)(2)(i), as amended as of July 1, 1994, Washington, D.C.

13. Was this rule previously adopted as an emergency rule?
 No.

14. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 12. DEPARTMENT OF ENVIRONMENTAL QUALITY UNDERGROUND STORAGE TANKS

ARTICLE 1. DEFINITIONS

- Section
R18-12-101. Definitions: A through F
R18-12-102. Definitions: G through P Responsibilities of Owners and Operators
R18-12-103. Definitions: R through Z

ARTICLE 2. TECHNICAL REQUIREMENTS

- Section
R18-12-210. Applicability
R18-12-211. Prohibition for Certain UST Systems
R18-12-220. Performance Standards for New UST Systems
R18-12-221. Upgrading of Existing UST Systems
R18-12-222. Notification Requirements
R18-12-230. Spill and Overfill Control
R18-12-231. Operation and Maintenance of Corrosion Protection
R18-12-232. Compatibility
R18-12-233. Repairs Allowed
R18-12-234. Reporting and Recordkeeping
R18-12-240. General Release Detection Requirements for all UST Systems
R18-12-241. Release Detection for Petroleum UST Systems
R18-12-242. Release Detection for Hazardous Substance UST Systems
R18-12-243. Methods of Release Detection for Tanks
R18-12-244. Methods of Release Detection for Piping
R18-12-245. Release Detection Recordkeeping
R18-12-250. Reserved
R18-12-251. Reserved
R18-12-252. Reserved
R18-12-253. Reserved
R18-12-254. Reserved
R18-12-255. Reserved
R18-12-256. Reserved
R18-12-257. Reserved
R18-12-258. Reserved
R18-12-259. Reserved
R18-12-260. Reserved
R18-12-261. Reserved

- R18-12-262. Reserved
R18-12-263. Reserved
R18-12-264. Reserved
R18-12-265. Reserved
R18-12-270. Temporary Closure
R18-12-271. Permanent Closure and Change-in-service
R18-12-272. Assessing the UST Site at Closure or Change-in-service
R18-12-273. Application of Closure Requirements to Previously Closed Systems
R18-12-274. Release Reporting and Corrective Action for Closed Systems
R18-12-280. Sampling Requirements
R18-12-281. UST System Codes of Practice and Performance Standards

ARTICLE 3. FINANCIAL RESPONSIBILITY

- Section
R18-12-300. Financial Responsibility; Applicability
R18-12-301. Financial Responsibility; Compliance Dates; Allowable Mechanisms; Evidence
R18-12-303. Amount and Scope of Required Financial Responsibility
R18-12-305. Financial Test of Self-insurance
R18-12-306. Guarantee
R18-12-307. Insurance and Risk Retention Group Coverage
R18-12-308. Surety Bond
R18-12-309. Letter of Credit
R18-12-310. Certificate of Deposit
R18-12-311. State Fund or Other State Assurance
R18-12-312. Trust Fund
R18-12-313. Standby Trust Fund
R18-12-314. Substitution of Financial Assurance Mechanisms by Owner and Operator Local Government Bond Rating Test
R18-12-315. Cancellation or Nonrenewal by a Provider of Financial Assurance Local Government Financial Test
R18-12-316. Reporting by Owner and Operator Local Government Guarantee
R18-12-317. Local Government Fund

Notices of Final Rulemaking

- R18-12-318. Drawing on Financial Assurance Mechanisms Substitution of Financial Assurance Mechanisms by Owner and Operator
- R18-12-319. Release from Financial Responsibility Requirements Cancellation or Nonrenewal by a Provider of Financial Assurance
- R18-12-320. Bankruptcy or other Incapacity of Owner, Operator, or Provider of Financial Assurance Reporting by Owner and Operator
- R18-12-321. Replenishment of Guarantees, Letters of Credit, or Surety Bonds
- R18-12-322. Drawing on Financial Assurance Mechanisms
- R18-12-323. Release from Financial Responsibility Requirements
- R18-12-324. Bankruptcy or Other Incapacity of Owner, Operator, or Provider of Financial Assurance
- R18-12-325. Replenishment of Guarantees, Letters of Credit, or Surety Bonds

ARTICLE 4. UNDERGROUND STORAGE TANK EXCISE TAX

Section

R18-12-401: Definitions

ARTICLE 1. DEFINITIONS

R18-12-101. Definitions: A through F.

In addition to the definitions prescribed in A.R.S. § 49-1001, the terms used in this Chapter have the following meanings:

1. "Accidental release" means, with respect to Article 3 only, any sudden or nonsudden release of petroleum from a UST system that results in a need for corrective action, compensation for bodily injury or property damage, or both, and that is neither expected nor intended by the UST system tank owner or operator, that results in a need for 1 or more of the following:
 - a. Corrective action.
 - b. Compensation for bodily injury.
 - c. Compensation for property damage.
2. "Ancillary equipment" means any device used to distribute, dispense, meter, monitor, or control the flow of regulated substances to and from an UST system, including, but not limited to, piping, leak detection equipment, fittings, flanges, valves, and pumps.
3. "Annual" means, with respect to R18-12-240 through R18-12-245 only, a calendar period of 12 consecutive months.
- 3-4. "Applicant", for purposes of Article 7 only, means an owner or operator who applies for a grant from the UST grant account.
- 4-5. "Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.
6. "Aviation fuel", for the purpose of Article 4 only, has the meaning ascribed to it in A.R.S. § 28-101(4).
- 5-7. "Bodily injury" means injury to the body, sickness, or disease sustained by any person, including death resulting from any of these at any time, has the meaning given to this term by Arizona law; however, this term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury.
8. "Cathodic protection" means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell.
9. "Cathodic protection tester" means a person who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection

systems as applied to buried or submerged metal piping and tank systems. At a minimum, such a person shall have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.

10. "CERCLA" has the meaning ascribed to it in A.R.S. § 49-201(4).
11. "CFR" means the Code of Federal Regulations, with standard references in this Chapter by Title and Part, so that "40 CFR 280" means Title 40 of the Code of Federal Regulations, Part 280.
12. "Change-in-service" means changing the use of an UST system from the storage of a regulated substance to the storage of a non-regulated substance.
13. "Chief financial officer" means, with respect to local government owners and operators, the individual with the overall authority and responsibility for the collection, disbursement, and use of funds by the local government.
14. "Clast" means an individual constituent, grain, or fragment of a sediment or rock, produced by the mechanical weathering of a larger rock mass.
15. "Clean Water Act" has the meaning ascribed to it in A.R.S. § 49-201(5).
16. "Compatible" means the ability of 2 or more substances to maintain their respective physical and chemical properties upon contact with 1 another under conditions likely to be encountered in the UST during the operational life of the UST system.
- 6-17. "Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors that are attached to a tank system and through which regulated substances flow. For the purpose of determining how much piping is connected to an individual UST system, the piping that joins multiple tanks two UST systems shall be divided allocated equally between the tanks them.
- 7-18. "Consultant" means a person who performs environmental services in an advisory, investigative, or remedial capacity.
19. "Consumptive use" means, with respect to heating oil only, use on the premises.
20. "Contamination" means the existence of a regulated substance outside the confines of an UST system.
- 8-21. "Contractor" means a person who is required to obtain and hold a valid license from the Arizona Registrar of Contractors which permits bidding and performance of removal, excavation, repair or construction services associated with an UST system.
- 9-22. "Controlling interest" means direct ownership of at least 50% of a firm, through voting stock, or otherwise.
- 10-23. "Corrective action services" means any service work that is provided required to be performed by the Department in order to fulfill the statutory regulatory requirements of A.R.S. § 49-1005 and the rules promulgated thereunder.
- 11-24. "Corrosion expert" means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. The person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and

Arizona Administrative Register
Notices of Final Rulemaking

- experience in corrosion control of buried or submerged metal piping systems and metal tanks.
- 42-25 "Cost ceiling amount" as described in R18-12-605 means the maximum amount determined by the Department to be reasonable ~~and reimbursable~~ for a corrective action service.
- 43-26 "Current assets" means assets which can be converted to cash within ~~1 one~~ year and are available to finance current operations or to pay current liabilities.
- 44-27 "Current liabilities" means those liabilities which are payable within 1 year.
28. "De minimis" means that quantity of regulated substance which is described by 1 of the following:
- a. When mixed with another regulated substance, is of such low concentration that the toxicity, detectability, or corrective action requirements of the mixture are the same as for the host substance;
 - b. When mixed with a non-regulated substance, is of such low concentration that a release of the mixture does not pose a threat to human health or the environment greater than that of the host substance.
29. "Department" has the meaning ascribed to it in A.R.S. § 49-101(1).
30. "Dielectric material" means a material that does not conduct electrical current and that is used to electrically isolate UST systems or UST system parts from surrounding soils or portions of UST systems from each other.
31. "Diesel" means, with respect to Article 4 only, a liquid petroleum product that meets the specifications in American Society for Testing and Materials Standard D-975-94, "Standard Specification for Diesel Fuel Oils" amended April 15, 1994 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
32. "Director" has that meaning ascribed to it in A.R.S. § 49-101(2).
33. "Electrical equipment" means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.
- 45-34 "Eligible person" means, with respect to Article 6 only, a member of the class of persons regulated by A.R.S. Title 49, Chapter 6, and the rules promulgated thereunder, not otherwise excluded under A.R.S. § 49-1052, and including all of the following:
- a. Any owner, operator, or designated representative of an owner or operator;
 - b. A political subdivision pursuant to A.R.S. § 49-1052(H);
 - c. A person described by A. R. S. § 49-1052(I).
35. "Emergency power generator" means a power generator which is used only when the primary source of power is interrupted. The interruption of the primary source of power shall not be due to any action or failure to take any action by the owner or operator of either the emergency generator or of the UST system which stores fuel for the emergency generator.
36. "Excavation zone" means the volume that contains or contained the tank system and backfill material and is bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.
37. "Existing tank system" means a tank system used to contain an accumulation of regulated substances on or before December 22, 1988, or for which installation has commenced on or before December 22, 1988.
- 46-38 "Facility" means, with respect to any owner or operator, all underground storage tank systems used for the storage of regulated substances which are owned or operated by such owner or operator and located on a single parcel of property, or on any contiguous or adjacent property.
39. "Facility identification number" means the unique number assigned to a storage facility by the Department either after the initial notification requirements of A.R.S. § 49-1002 are satisfied, or after a refund claim is submitted and approved pursuant to R18-12-409.
40. "Facility location", for the purpose of Article 4 only, means the street address or a description of the location of a storage facility.
41. "Facility name" means the business or operational name associated with a storage facility.
42. "Farm tank" means a tank system located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank shall be located on the farm property. The term "farm" includes fish hatcheries, range-land, and nurseries with growing operations.
- 47-43 "Financial reporting year" means the latest consecutive 12-month period, either fiscal or calendar, for which financial statements used to support the financial test of self-insurance under R18-12-305 are prepared, including any of the following, if applicable:
- a. A 10-K report submitted to the Securities and Exchange Commission,
 - b. An annual report of tangible net worth submitted to Dun and Bradstreet,
 - c. Annual reports submitted to the Energy Information Administration or the Rural Electrification Administration.
- 48-44 "Firm" means any for-profit entity, not-for-profit entity, or governmental subdivision. An individual doing business as a sole proprietor is a firm for purposes of this Chapter.
45. "Flow-through process tank" means a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. The term "flow-through process tank" does not include a tank used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.
- 44-46 "Free product" means a regulated substance that is present as a nonaqueous phase liquid (for example, liquid not dissolved in water).
47. "Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.
48. "Grant request" means the total amount requested on the application for a grant from the UST grant account, plus any cost to the Department for conducting a feasibility determination in accordance with R18-12-710, in conjunction with the application.
49. "Groundwater" has that meaning ascribed to it in A.A.C. R18-7-201(9).
50. "Hazardous substance UST system" means an underground storage tank system that contains a hazardous substance as defined in A.R.S. § 49-1001(13)(b) or any mixture of such substance and petroleum, which is not a petroleum UST system.
51. "Heating oil" means petroleum that is No. 1, No. 2, No. 4--light, No. 4--heavy, No. 5--light, No. 5--heavy, or No.

Notices of Final Rulemaking

- 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for 1 of these fuel oils for heating purposes.
52. "Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.
53. "Implementing agency" means, with respect to Article 3 only, the Department of Environmental Quality for UST systems subject to the jurisdiction of the state of Arizona, or the EPA for other jurisdictions or, in the case of a state with a program approved under 42 USC 6991 Section 9004 (or pursuant to a memorandum of agreement with EPA), the designated state or local agency responsible for carrying out an approved UST program.
54. "Indian country" means, pursuant to 18 U.S.C. Section 1151, all of the following:
- a. All land within the limits of an Indian reservation under the jurisdiction of the United States government which is also located within the borders of this state, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation;
 - b. All dependent Indian communities within the borders of the state whether within the original or subsequently acquired territory of the state;
 - c. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through such allotments.
55. "Induration" means the hardening of a rock or rock material by the action of heat, pressure, or the introduction of some cementing material not commonly contained in the original mass. Induration also means the hardening of a soil horizon by chemical action to form hardpan.
56. "Installation" means the placement and preparation for placement of any UST system or UST system part into an excavation zone. Installation is considered to have commenced if both of the following exist:
- a. The owner and operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the UST system;
 - b. The owner and operator has begun a continuous on-site physical construction or installation program or has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction at the site or installation of the UST system to be completed within a reasonable time.
57. "Legal defense cost" means, with respect to Article 3 only, any expense that an owner or operator, or provider of financial assurance incurs in defending against claims or actions brought under any of the following circumstances:
- a. By EPA or a state to require corrective action or to recover the costs of corrective action;
 - b. By or on behalf of a 3rd party for bodily injury or property damage caused by an accidental release;
 - c. By any person to enforce the terms of a financial assurance mechanism.
58. "Liquid trap" means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.
59. "Local government" means a county, city, town, school district, water and aqueduct management district, irrigation district, power district, electrical district, agricultural improvement district, drainage and flood control district, tax levying public improvement district, local government public transportation system, and any political subdivision as defined under A.R.S. § 49-1001(12).
60. "LUST" means leaking underground storage tank.
61. "Maintenance" means those actions necessary to ensure the proper working condition of an UST system.
62. "Motor vehicle fuel", for the purpose of Article 4 only, has that meaning ascribed to it in A.R.S. § 28-101(34).
63. "New tank system" means a tank system that will be used to contain an accumulation of regulated substances and for which installation has commenced after December 22, 1988.
64. "Noncommercial purposes" means, with respect to motor fuel, not for resale.
65. "On the premises where stored" means, with respect to A.R.S. § 49-1001(17)(b) only, a single parcel of property or any contiguous or adjacent parcels of property.
66. "Operational life" means the period beginning when installation of the tank system has begun and ending when the tank system is properly closed in accordance with R18-12-271 through R18-12-274.
67. "Overfill" means a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of a regulated substance to the environment.
68. "Owner identification number" means the unique number assigned to the owner of an underground storage tank by the Department after the initial notification requirements of A.R.S. § 49-1002 are satisfied, or after a refund claim is submitted and approved pursuant to R18-12-409.
69. "Petroleum marketing facility" means a facility at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.
70. "Petroleum marketing firm" means a firm owning a petroleum marketing facility. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms.
71. "Petroleum UST system" means an UST system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. These systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.
72. "Pipe" or "Piping" means a hollow cylinder or tubular conduit that is constructed of non-earthen materials.
73. "Pipeline facility" means new or existing pipe rights-of-way and any associated equipment, gathering lines, facilities, or buildings.
74. "Property damage" means physical injury to, destruction of, or contamination of tangible property, including all resulting loss of use of that property; or loss of use of tangible property that is not physically injured, destroyed, or contaminated, but has been evacuated, withdrawn from use, or rendered inaccessible.
75. "Provider of financial assurance" means an entity that provides financial assurance to an owner or operator of an underground storage tank through 1 of the mechanisms listed in R18-12-306 through R18-12-312 or R18-12-316, including a guarantor, insurer, risk retention group,

Arizona Administrative Register
Notices of Final Rulemaking

- surety, or issuer of a letter of credit.
76. "Release detection" means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial space between the UST system and its secondary barrier or secondary containment around it.
77. "Repair" means to restore a tank or UST system component that has caused or may cause a release of regulated substance from the UST system.
78. "Report of work" means a written summary of corrective action services performed.
79. "Reserved and designated funds" means those funds of a nonprofit, not-for-profit, or local government entity which, by action of the governing authority of the entity, by the direction of the donor, or by statutory or constitutional limitations, may not be used for conducting UST upgrades, replacements, or removals, or for installing UST leak detection systems, or conducting corrective actions, including payment for expedited review of related documents by the Department, on releases of regulated substances.
80. "Residential tank" means an UST system located on property used primarily for dwelling purposes.
81. "Routinely contains product" or "routinely contains regulated substance" means the part of an UST system which is designed to contain regulated substances and includes all internal areas of the tank and all internal areas of the piping, excluding only the vent piping.
82. "Septic tank" means a water-tight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.
83. "Solid Waste Disposal Act" for the purposes of this Chapter means the "federal act" as defined by A.R.S. § 49-921(3).
84. "Spill" means the loss of regulated substance during the transfer to the UST system.
85. "Storage facility" means, for the purpose of Article 4 only, the common, identifiable, location at which deliveries of regulated substances are made to an underground storage tank, an aboveground storage tank, or to a group of underground and aboveground storage tanks, and to which the Department has assigned a single facility identification number.
86. "Storm-water or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water runoff resulting from precipitation, or of domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.
87. "Substantial business relationship" means the extent of a business relationship necessary under Arizona law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor and the owner or operator.
88. "Substantial governmental relationship" means the extent of a governmental relationship necessary under Arizona law to make an added guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract under R18-12-316 is issued "incident to that relationship" if it arises from a clear commonality of interest in the event of an UST release such as coterminous boundaries, overlapping constituencies, common ground water aquifer, or other relationship other than monetary compensation that provides a motivation for the guarantor to provide a guarantee.
89. "Supplier" means, for the purpose of Article 4 only, with respect to collection of the UST excise tax, a person who is described by either A.R.S. § 28-1599.45(A) or (B). The term "supplier" includes a distributor, as defined by A.R.S. § 28-101(18), who is required to be licensed by A.R.S. Title 28, Chapter 9, Article 1.
90. "Supplier identification number" means, for the purpose of Article 4 only, the unique number assigned to the supplier by the Department of Transportation for the purpose of administering the motor vehicle fuel tax under A.R.S. Title 28, Chapter 9, Article 1.
91. "Surface impoundment" is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials, but which may be lined with man-made materials, that is not an injection well.
92. "Suspected release" has that meaning ascribed to it in A.R.S. § 49-1001(15).
93. "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties.
94. "Tax" means, for the purpose of Article 4 only, the excise tax on the operation of underground storage tanks levied by A.R.S. Title 49, Chapter 6, Article 2.
95. "Taxpayer" means, for the purpose of Article 4 only, the owner or operator of an underground storage tank who pays the tax.
96. "Tester" means a person who performs tightness tests on UST systems, or on any portion of an UST system including tanks, piping, or leak detection systems.
97. "Underground area" means an underground room, such as a basement, cellar, shaft or vault, and providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.
98. "Underground storage tank" has the meaning ascribed to it in A.R.S. § 49-1001(17).
99. "Unreserved and undesignated funds" means those funds that are not reserved or designated funds and can be transferred at will by the governing authority to other funds.
100. "Upgrade" means the addition to or retrofit of an UST system or UST system parts, in accordance with R18-12-221, to improve the ability to prevent release of a regulated substance.
101. "UST" means an underground storage tank pursuant to A.R.S. § 49-1001(17).
102. "UST grant account" or "grant account" means the account designated pursuant to A.R.S. § 49-1071.
103. "UST regulatory program" means the program established by and described in A.R.S. Title 49, Chapter 6 and the rules promulgated thereunder.
104. "UST system" or "tank system" means an underground storage tank, connected underground piping, and underground ancillary equipment and containment system, if any.
105. "Volatile regulated substance" means any regulated substance that generally has the following chemical characteristics: a vapor pressure of greater than 0.5 mmHg at 20°C, a Henry's Law Constant of greater than 1×10^{-5} atm·m³/mol, and which has a boiling point of less than 250°C - 300°C

- C.
106. "Wastewater treatment tank" means a tank system that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

R18-12-102. Definitions—G. through P.—Responsibilities of Owners and Operators

In addition to the definitions prescribed in A.R.S. § 49-1001, the terms used in this Chapter shall have the following meanings:

1. "Legal defense cost" means any expense that an owner and operator or provider of financial assurance incurs in defending against claims or actions brought under any 1 of the following circumstances:
 - a. By EPA or a state to require corrective action or to recover the costs of corrective action;
 - b. By or on behalf of a 3rd party for bodily injury or property damage caused by an accidental release;
 - c. By any person to enforce the terms of a financial assurance mechanism.
2. "Petroleum marketing facilities" mean all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.
3. "Petroleum marketing firms" mean all firms owning petroleum marketing facilities. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms.
4. "Petroleum UST system" means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.
5. "Pipe" or "Piping" means a hollow cylinder or tubular conduit that is constructed of non-earthen materials.
6. "Property damage" shall have the meaning given this term by Arizona law. This term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage. However, such exclusions for property damage shall not include corrective action associated with releases from tanks which are covered by the policy.
7. "Provider of financial assurance" means an entity that provides financial assurance to an owner and operator of an underground storage tank through 1 of the mechanisms listed in R18-12-305 through 309 and 312, including a guarantor, insurer, risk retention group, surety, or issuer of a letter of credit.

As provided in A.R.S. § 49-1016(A), the responsibilities of this Chapter, unless indicated otherwise, are imposed on the owner and the operator of an UST. If the owner and operator of an UST are separate persons, only 1 person is required to discharge any specific responsibility. Both persons are liable in the event of noncompliance.

R18-12-103. Definitions P. through Z.

In addition to the definitions prescribed in A.R.S. § 49-1001, the terms used in this Chapter shall have the following meanings:

1. "Report of work" means a written summary of corrective actions performed, either in their entirety or in phases as described in A.R.S. § 49-1005 and any rules promulgated thereunder and in 40 CFR 280 Subpart F, for addressing the UST release at the site. 40 CFR 280 Subpart F as amended as of July 1, 1991 (and no future editions), is incorporated herein by reference and is on file with the Department of Environmental Quality and the Office of

the Secretary of State.

2. "Substantial business relationship" means the extent of a business relationship necessary under Arizona law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor and the owner or operator.
3. "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, "assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.
4. "Termination" under 40 CFR 280.97(b)(1) and (2) as referenced in R18-12-307(B), means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy. 40 CFR 280.97(b)(1) and (2), as amended as of July 1, 1991 (and no future editions), is incorporated herein by reference and is on file with the Department of Environmental Quality and the Office of the Secretary of State.
5. "Tester" means a person who performs tightness tests on underground storage tank systems, or on any portion of an underground storage tank system including tanks, piping, or leak detection systems where those tests are performed as part of a corrective action taken in response to a release from the UST system, and who meets qualifications pursuant to R18-12-601(F).
6. "UST" means an underground storage tank pursuant to A.R.S. § 49-1001(17).
7. "UST regulatory program" means the program established by and described in A.R.S. Title 49, Chapter 6 and the rules promulgated thereunder.
8. "UST system" or "Tank system" means an underground storage tank, and connected piping, ancillary equipment, and containment system, if any.

ARTICLE 2. TECHNICAL REQUIREMENTS

R18-12-210. Applicability

- A. The requirements of this Article apply to all owners and operators of an UST system, except as otherwise provided in subsections (B) through (D).
- B. The following UST systems are excluded from the requirements of this Article:
 1. Any UST system holding hazardous wastes which are listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances;
 2. Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;
 3. Equipment or machinery that contains regulated substances solely for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
 4. Any UST system with a capacity of 110 gallons or less;
 5. Any UST system that contains a de minimis concentration of regulated substances;
 6. Any emergency spill or overflow containment UST system that is expeditiously emptied after use.
- C. Only R18-12-101, R18-12-210, R18-12-211, and the provisions of A.R.S. § 49-1005 and the rules promulgated thereunder apply to the following types of UST systems:

Arizona Administrative Register
Notices of Final Rulemaking

1. Wastewater treatment tank systems other than those specified in subsection (B)(2);
 2. Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954, 42 U.S.C. §§ 2011 et. seq.;
 3. Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR 50 Appendix A;
 4. Airport hydrant fuel distribution systems;
 5. UST systems with field-constructed tanks.
- D. R18-12-240 through R18-12-245 do not apply to any UST system that stores fuel solely for use by emergency power generators.

R18-12-211. Prohibition for Certain UST Systems

- A. A person shall not install an UST system listed in R18-12-210(C) for the purpose of storing regulated substances unless the UST system, whether of single-wall or double-wall construction, meets all of the following requirements:
1. The UST system will prevent releases due to corrosion or structural failure for the operational life of the UST system;
 2. The UST system is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a noncorrodible material, or designed in a manner to prevent the release or threatened release of any stored substance;
 3. The UST system is constructed or lined with material that is compatible with the stored substance.
- B. Notwithstanding subsection (A), an UST system without corrosion protection may be installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operational life. Owners and operators shall maintain records that demonstrate compliance with the requirements of this subsection for the remaining operational life of the UST system.
- C. Compliance with the corrosion protection provisions of this Section shall be determined in accordance with the performance standards set forth in R18-12-281(A).

R18-12-220. Performance Standards for New UST Systems

- A. Owners and operators of a new UST system shall meet the requirements described in this Section in order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances.
- B. A tank shall be properly designed and constructed, and any portion underground that routinely contains a regulated substance shall be protected from corrosion according to 1 of the following methods:
1. The tank is constructed of fiberglass-reinforced plastic. Compliance with this subsection shall be determined in accordance with the performance standards set forth in R18-12-281(B);
 2. The tank is constructed of steel and is cathodically protected, in accordance with the performance standards of R18-12-281(C), by all of the following:
 - a. The tank is coated with a suitable dielectric material;
 - b. The field-installed cathodic protection systems are designed by a corrosion expert;
 - c. The impressed current systems, if used, are designed to allow determination of current operating status as required in R18-12-231(C);
 - d. The cathodic protection systems are operated and maintained in accordance with R18-12-231.
 3. The tank is constructed of a steel-fiberglass-reinforced-

plastic composite. Compliance with this subsection shall be determined in accordance with the performance standard set forth in R18-12-281(D).

4. The tank is constructed of metal without additional corrosion protection measures, and both of the following conditions are met:
 - a. The tank is installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life;
 - b. Owners and operators maintain records that demonstrate compliance with the requirements of subsection (B)(4)(a) for the remaining operational life of the tank.
 5. The tank construction and corrosion protection are determined by the Department to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements of subsections (B)(1) through (4).
- C. The piping that routinely contains regulated substances and is in contact with the ground shall be properly designed, constructed, and protected from corrosion according to 1 of the following methods:
1. The piping is constructed of fiberglass-reinforced plastic. Compliance with this subsection shall be determined in accordance with the performance standard set forth in R18-12-281(E).
 2. The piping is constructed of steel and in meeting the performance standards of R18-12-281(F) is cathodically protected according to all of the following:
 - a. The piping is coated with a suitable dielectric material;
 - b. Field-installed cathodic protection systems are designed by a corrosion expert;
 - c. Impressed current systems, if used, are designed to allow determination of current operating status as required in R18-12-231(C);
 - d. Cathodic protection systems are operated and maintained in accordance with R18-12-231.
 3. The piping is constructed of metal without additional corrosion protection measures, and all of the following requirements are satisfied:
 - a. The piping is installed at a site that is determined by a corrosion expert to not be corrosive enough to cause it to have a release due to corrosion during its operating life;
 - b. The piping meets the performance standards of R18-12-281(G);
 - c. Owners and operators maintain records that demonstrate compliance with the requirements of this subsection for the remaining life of the piping.
 4. The piping construction and corrosion protection are determined by the Department to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in subsections (C)(1) through (3).
- D. Except as provided in subsection (D)(3), owners and operators shall use both of the following spill and overfill prevention equipment systems to prevent spilling and overfilling associated with transfer of a regulated substance to the UST system:
1. Spill prevention equipment that will prevent release of a regulated substance to the environment when the transfer hose is detached from the fill pipe;
 2. Overfill prevention equipment that will do 1 or more of

Notices of Final Rulemaking

the following:

- a. Automatically shut off flow into the tank when the tank is no more than 95% full;
- b. Alert the transfer operator when the tank is no more than 90% full by restricting the flow into the tank or triggering a high-level alarm that can be heard at the point of transfer;
- c. Restrict flow 30 minutes prior to overfilling, alert the operator with a high level alarm that can be heard at the point of transfer 1 minute before overfilling, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to a regulated substance due to overfilling.
3. Owners and operators are not required to use the spill and overfill prevention equipment specified in subsections (D)(1) and (2) if either of the following conditions is met:
 - a. Alternative equipment is used that is determined by the Department to be no less protective of human health and the environment than the equipment specified in subsections (D)(1) or (2);
 - b. The tank is filled by transfers of no more than 25 gallons at 1 time.

E. All tanks and piping shall meet both of the following requirements:

1. Be properly installed in accordance with the manufacturer's instructions;
2. Be installed according to the performance standards set forth in R18-12-281(H).

F. Owners shall ensure that 1 or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with subsection (E):

1. The installer has been certified by the tank and piping manufacturers.
2. The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation.
3. The installation has been inspected and approved by the Department.
4. All work listed in the manufacturer's installation checklists has been completed.
5. Owners and operators have complied with another method for ensuring compliance with subsection (E) that is determined by the Department to be no less protective of human health and the environment.

G. Owners shall provide a certification of compliance on the UST Notification Form in accordance with R18-12-222(D) and shall ensure that a certification statement in accordance with the applicable requirements of R18-12-222(E) is signed by the installer on the Notification Form prior to submission to the Department.

H. If an UST system is installed or modified to meet the requirements of this Section, owners shall notify the Department in accordance with R18-12-222(F)(2) within 30 days of the date that the UST system is brought into operation or modified.

R18-12-221. Upgrading of Existing UST Systems

A. Not later than December 22, 1998, each existing UST system shall comply with 1 of the following requirements:

1. New UST system performance standards under R18-12-220;
2. The upgrading requirements described in subsections (B) through (E);
3. Closure requirements, including applicable requirements for release reporting and corrective action, under R18-12-270 through R18-12-274.

B. A steel tank shall be upgraded to meet 1 of the following

requirements:

1. A tank may be upgraded by internal lining if both of the following conditions are met:

- a. The internal lining is installed in accordance with the requirements of R18-12-233;
- b. Within 10 years after the internal lining is installed, and every 5 years thereafter, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications.

2. A tank may be upgraded by cathodic protection if the cathodic protection system meets the requirements of R18-12-220(B)(2)(b) through (d), and the integrity of the tank is ensured by using at least 1 of the following methods:

- a. The tank is internally inspected and assessed to ensure that it is structurally sound and free of corrosion holes prior to installing the cathodic protection system;
- b. The tank has been installed for less than 10 years and is monitored monthly for releases in accordance with R18-12-243(D) through (H);
- c. The tank has been installed for less than 10 years and is assessed for corrosion holes by conducting 2 tightness tests that meet the requirements of R18-12-243(C). The 1st tightness test shall be conducted prior to installing the cathodic protection system. The 2nd tightness test shall be conducted between 3 and 6 months following the 1st operation of the cathodic protection system;
- d. The tank is assessed for corrosion holes by a method that is determined by the Department to prevent releases in a manner that is no less protective of human health and the environment than the methods described in subsections (B)(2)(a) through (c).

3. A tank may be upgraded by both internal lining and cathodic protection if both of the following requirements are met:

- a. The lining is installed in accordance with the requirements of R18-12-233,
- b. The cathodic protection system meets the requirements of R18-12-220(B)(2)(b) through (d).

C. Metal piping that routinely contains regulated substances and is in contact with the ground shall be cathodically protected in accordance with the applicable requirements of R18-12-220(C)(2)(b) through (d).

D. Any upgrading by use of corrosion protection described in this Section shall be accomplished in accordance with the performance standards set forth in R18-12-281(I).

E. To prevent spilling and overfilling associated with the transfer of a regulated substance to the UST system, all existing UST systems shall comply with new UST system spill and overfill prevention equipment requirements specified in R18-12-220(D).

F. Owners shall ensure that 1 or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with the requirements of this Section by providing a certification of compliance on the UST Notification Form in accordance with R18-12-222(D):

1. The installer has been certified by the equipment or system manufacturers;
2. The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation;
3. All work listed in the manufacturer's installation checklists has been completed;

Notices of Final Rulemaking

4. The owner has complied with another method for ensuring compliance with the requirements of this Section that is determined by the Department to be no less protective of human health and the environment.
- G.** Owners and operators shall ensure that a certification statement in accordance with the applicable requirements of R18-12-222(E) is signed by the installer on the Notification Form prior to submission to the Department.
- H.** If an UST system is upgraded in accordance with this Section, owners and operators shall notify the Department in accordance with R18-12-222(F)(2) within 30 days of the date that the UST system is upgraded.
- R18-12-222. Notification Requirements**
- A.** An owner of an UST system shall comply with the notification requirements of this Section in accordance with those described in A.R.S. § 49-1002.
- B.** An owner shall submit the most current and complete information on each UST system at each facility utilizing the Departmental form titled "Notification for Underground Storage Tanks" ("Notification Form"). An owner shall submit a separate Notification Form to the Department for each facility which is owned. Submitted information shall include all of the following for each UST system:
1. Type of notification specifying 1 of the following:
 - a. New facility.
 - b. Amendment of previous Notification Form.
 - c. Closure.
 2. The name and mailing address of the owner of the UST system;
 3. Facility street address and the associated county assessor book, map, and parcel;
 4. Type of owner, specifying whether government, commercial, or private;
 5. Whether the UST system is located within Indian country;
 6. Facility type;
 7. The name and mailing address of the operator of the UST system;
 8. Compliance with financial responsibility requirements in accordance with R18-12-300 through R18-12-325, and the mechanism or mechanisms used to demonstrate compliance;
 9. Facility map including tanks and associated piping in addition to major structures;
 10. Status of each UST system as 1 of the following:
 - a. Currently in use.
 - b. Temporarily out of use.
 - c. Permanently out of use.
 11. Date of the UST system installation and date the UST system was 1st brought into operation;
 12. Estimated total capacity of the tank;
 13. Material of tank construction and method of corrosion protection for each UST system;
 14. Date of repair, if tank has been repaired;
 15. Material of piping construction and method of corrosion protection for each UST system;
 16. Date of repair, if piping has been repaired;
 17. Type of piping delivery system;
 18. Methods of leak detection currently in use for tank and piping;
 19. Whether the UST system is connected to an emergency generator;
 20. Substance currently or last stored in the UST system in greatest quantity by volume;
 21. If the substance currently or last stored in the UST system is a hazardous substance, identification of the CERCLA

- name or Chemical Abstracts Service number;
22. If the substance currently or last stored in the UST system is a mixture of substances, identification of the constituents of the mixture.
- C.** In addition to the information required in subsection (B), if an UST system is permanently closed, temporarily closed, or if a change-in-service has occurred, an owner shall provide all of the following:
1. The estimated date the UST system was last used, and the estimated date the UST system was permanently closed;
 2. Identification of the UST system as 1 of the following:
 - a. Removed from the ground.
 - b. Closed in the ground and filled with inert solid materials and a description of those materials.
 - c. Completed change-in-service and a description of current use.
 - d. Temporarily closed.
 - e. Temporarily closed with a request for extension of temporary closure.
 3. Whether an UST site assessment was completed;
 4. Whether there was evidence of a leak.
- D.** An owner shall certify under penalty of law that the owner has personally examined and is familiar with the information submitted in the Notification Form and all attached documents, and that based either on direct knowledge or on inquiry of those individuals immediately responsible for obtaining the information, the owner believes that the submitted information is true, accurate, and complete. For a new or upgraded UST system, this certification shall include compliance with all the following requirements:
1. Installation of tanks and piping under R18-12-220(E);
 2. Cathodic protection of steel tanks and piping under R18-12-220(B) and (C), or R18-12-221(B) through (D);
 3. Spill and overfill protection under R18-12-220(D) or R18-12-221(E);
 4. Release detection under R18-12-240 through R18-12-245;
 5. Financial responsibility under R18-12-300 through R18-12-325.
- E.** An owner of a new or upgraded UST system shall ensure that the installer certifies on the Notification Form that to the best information and belief of the installer the items set forth in subsections (D)(1) through (4) are true.
- F.** Any request for an extension of temporary closure shall be made in accordance with R18-12-270. In addition, an owner of an UST system shall notify the Department within 30 days after any 1 of the following occurs:
1. A change in the operator of the UST system;
 2. A replacement or upgrade of any portion of the UST system in accordance with R18-12-220 or R18-12-221;
 3. A change in leak detection status in accordance with R18-12-240 through R18-12-245;
 4. Temporary closure in accordance with R18-12-270;
 5. Return to active service following temporary closure in accordance with R18-12-270(D);
 6. Permanent closure or change-in-service in accordance with R18-12-271 through R18-12-274;
 7. A change in the contents of the UST system among the categories of regulated substances described in subsections (B)(20), (21), or (22);
 8. A change in status of financial responsibility in accordance with R18-12-300 through R18-12-325.
- G.** In the case of a change of ownership of an UST system, 1 of the following shall occur:
1. When a vendor sells an UST system or a tank for use as an UST after May 8, 1986, the vendor shall inform the

Notices of Final Rulemaking

purchaser, on a form prescribed by the Department, that the Resource Conservation and Recovery Act (RCRA) requires owners of certain underground storage tanks to notify the Department within 30 days of the existence of the tank.

2. When a person transfers ownership of an UST system, both of the following shall occur:
 - a. The transferor shall inform the Department in writing of the transfer of its interest in the UST system including the name and address of the transferor and transferee, name and telephone number of the contact person for the transferee and effective date of the transfer. In addition, the transferor shall advise the transferee of the notification requirements of this Section, utilizing the form referenced in subsection (G)(1);
 - b. The transferee shall submit to the Department a completed Notification Form within 30 days of the transfer of interest.

R18-12-230. Spill and Overfill Control

- A. Owners and operators shall ensure that releases due to spilling or overfilling do not occur. Owners and operators shall ensure, before the transfer is made, that the volume then available in the tank is greater than the volume of regulated substance to be transferred to the tank. Owners and operators also shall insure that the operation is monitored constantly to prevent overfilling and spilling. Compliance with this subsection shall be determined in accordance with the performance standards set forth in R18-12-281(J).
- B. Owners and operators shall report, investigate, and clean up any spills and overfills in accordance with A.R.S. §§ 49-1004 and 49-1005 and the rules promulgated thereunder.

R18-12-231. Operation and Maintenance of Corrosion Protection

- A. A corrosion protection system shall be operated and maintained to continuously provide corrosion protection to the metal components of an UST system which are subject to the corrosion protection requirements of R18-12-220 and R18-12-221 and to piping which routinely contains regulated substances and is in contact with the ground.
- B. An UST system equipped with cathodic protection systems shall be inspected for proper operation by a cathodic protection tester. Owners and operators shall ensure compliance with both of the following requirements:
 1. A cathodic protection system shall be tested within 6 months of installation and at least every 3 years thereafter.
 2. The criteria that are used to determine that cathodic protection is adequate as required by this Section shall be in accordance with the performance standards set forth in R18-12-281(K).
- C. An UST system with an impressed current cathodic protection system, in addition to meeting the requirements of subsections (A) and (B) shall be inspected every 60 days to ensure the equipment is operating in accordance with its design specifications.
- D. For an UST system using cathodic protection, records of the operation of the cathodic protection shall be maintained in accordance with R18-12-234 to demonstrate compliance with the performance standards in this Section. These records shall provide the following:
 1. The results of testing from the last 2 inspections required by subsection (B).
 2. The results of the last 3 inspections required by subsection (C).

R18-12-232. Compatibility

Owners and operators shall use an UST system made of or lined with materials that are compatible with the substance stored in the UST system. Compliance with this Section shall be determined in accordance with the performance standards set forth in R18-12-281(L).

R18-12-233. Repairs Allowed

- A. Owners and operators of an UST system shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. The repairs shall meet the following requirements:
 1. Repairs to an UST system shall be properly conducted in accordance with performance standards set forth in R18-12-281(M);
 2. Repairs to a fiberglass-reinforced plastic tank shall be made by the manufacturer's authorized representative or in accordance with a performance standard set forth in R18-12-281(N);
 3. Any metal pipe sections and fittings that have released a regulated substance as a result of corrosion or other damage shall be replaced. Fiberglass pipe and fittings shall be repaired in accordance with the manufacturer's specifications or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.
- B. Repaired tanks and piping shall be tightness tested in accordance with the specifications described in R18-12-243(C) and R18-12-244(B) within 30 days following the date of the completion of the repair unless 1 of the following procedures is employed:
 1. The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory;
 2. The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in R18-12-243(D) through (H);
 3. Another test method is used that is determined by the Department to be no less protective of human health and the environment than those otherwise listed in subsections (B)(1) and (2).
- C. Within 6 months following the repair of any cathodically protected UST system, the cathodic protection system shall be tested in accordance with R18-12-231(B) and (C) to ensure that it is operating properly.
- D. Owners and operators of an UST system shall maintain records of each repair for the remaining operational life of the UST system that demonstrate compliance with the requirements of this Section.

R18-12-234. Reporting and Recordkeeping

- A. Owners shall submit notification for all UST systems in accordance with R18-12-222. Additionally, owners and operators shall submit the following information to the Department:
 1. Reports of all releases including suspected releases in accordance with A.R.S. § 49-1004 and the rules promulgated thereunder;
 2. Corrective actions planned or taken including initial investigation and abatement measures in accordance with A.R.S. § 49-1005;
 3. The information required in accordance with R18-12-271 before starting permanent closure or change-in-service;
 4. The site assessment report in accordance with R18-12-271(D).
- B. Owners and operators shall maintain all of the following information:
 1. A corrosion expert's analysis of site corrosion potential if

Arizona Administrative Register
Notices of Final Rulemaking

corrosion protection equipment is not used in accordance with R18-12-211(B), R18-12-220(B)(4) and R18-12-220(C)(3);

2. Documentation of operation of corrosion protection equipment in accordance with R18-12-231;
3. Documentation of UST system repairs in accordance with R18-12-233(D);
4. Documentation of compliance with release detection requirements in accordance with R18-12-245.

C. Owners and operators shall keep the records required by subsection (B) either:

1. At the UST site and immediately available for inspection by the Department;
2. At a readily available alternative site and be provided for inspection to the Department upon request.

R18-12-240. General Release Detection Requirements for All UST Systems

A. Owners and operators of a new or existing UST system shall provide a method, or combination of methods, of release detection that meets all of the following requirements:

1. Can detect a release from any portion of the tank and the connected underground piping that routinely contains a regulated substance;
2. Is installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition;
3. Meets the performance requirements in R18-12-243 or R18-12-244, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer;
4. Is capable of detecting the leak rate or quantity specified for that method in R18-12-243 or R18-12-244 with a Probability of Detection (PD) of a release of 0.95 and a Probability of False Alarm (PFA) of 0.05 by the date shown in subsections (A)(4)(a) or (b) unless the method was permanently installed prior to that date:
 - a. Manual Tank Gauging, in accordance with R18-12-243(B); Tank Tightness Testing, in accordance with R18-12-243(C); Automatic Tank Gauging, in accordance with R18-12-243(D); Line Tightness Testing, in accordance with R18-12-244(B); December 22, 1990;
 - b. Automatic Line Leak Detectors, in accordance with R18-12-244(A); September 22, 1991.

B. When a release detection method operated in accordance with the performance standards in R18-12-243 and R18-12-244 indicates a release may have occurred, owners and operators shall inform the Department in accordance with A.R.S. § 49-1004.

C. Owners and operators of an UST system shall comply with the release detection requirements of this Section and R18-12-241 through R18-12-245 by December 22 of the year listed in the following table:

SCHEDULE FOR PHASE-IN OF RELEASE DETECTION

Year	When release detection is required			
system installed	(by December 22 of the year indicated)			
	1989	1990	1991	1992
Before 1965	RD	P		
or				

date		
unknown		
1965-69..	P/RD	
1970-74..	P	RD
1975-79..	P	RD
1980-88..	P	RD

New tanks (after December 22, 1988) immediately upon installation.

P = shall begin release detection for all pressurized piping as defined in R18-12-241(B)(1).

RD = shall begin release detection for tanks and suction piping in accordance with R18-12-241(A), (B)(2), and R18-12-242.

D. Any existing UST system that cannot apply a method of release detection that complies with the requirements of this Section and R18-12-241 through R18-12-245 shall complete the closure procedures in R18-12-270 through R18-12-274 by the date on which release detection is required for that UST system under subsection (C).

R18-12-241. Release Detection for Petroleum UST Systems

A. Owners and operators of petroleum UST systems shall provide release detection for tanks. Tanks shall be monitored for releases at least once every month using 1 of the methods listed in R18-12-243(D) through (H) except that:

1. An UST system that meets the new or upgraded UST system performance standards of R18-12-220 or R18-12-221, and the monthly inventory control requirements of R18-12-243(A) or the manual tank gauging requirements of R18-12-243(B), may use tank tightness testing conducted in accordance with R18-12-243(C) at least every 5 years until December 22, 1998, or until 10 years after the tank is installed or upgraded, whichever is later. The initial tank tightness test shall be performed on or before the compliance date for the tank in accordance with R18-12-240(C);
2. An UST system that does not meet the performance standards in R18-12-220 or R18-12-221 may use annual tank tightness testing conducted in accordance with R18-12-243(C) in conjunction with either monthly inventory control conducted in accordance with R18-12-243(A) or the manual tank gauging requirements of R18-12-243(B) until December 22, 1998, when the tank shall be upgraded under R18-12-221 or permanently closed under R18-12-271 through R18-12-274. The initial tank tightness test shall be performed on or before the compliance date for the tank as set forth in R18-12-240(C);
3. A tank with a capacity of 550 gallons or less may use manual tank gauging conducted in accordance with R18-12-243(B) as a sole method for leak detection.

B. Owners and operators of petroleum UST systems shall provide release detection for underground piping. Underground piping that routinely contains petroleum shall be monitored for releases in a manner that meets 1 of the following requirements:

1. Underground piping that conveys petroleum under pressure shall meet both of the following requirements:
 - a. Be equipped with an automatic line leak detector which meets the requirements of R18-12-244(A);
 - b. Have an annual line tightness test conducted in accordance with R18-12-244(B) or have monthly monitoring conducted in accordance with R18-12-244(C).
2. Except as otherwise provided in this subsection, under-

Notices of Final Rulemaking

ground piping that conveys petroleum under suction shall either have a line tightness test conducted at least every 3 years in accordance with R18-12-244(B), or use a monthly monitoring method conducted in accordance with R18-12-244(C). Release detection is not required for suction piping that is designed and constructed to meet all of the following standards:

- a. The below-grade piping operates at less than atmospheric pressure;
- b. The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;
- c. Only 1 check valve is included in each suction line;
- d. The check valve is located directly below and as close as practical to the suction pump and is capable of being inspected;
- e. A method is provided that allows compliance with the requirements of subsections (B)(2)(a) through (d) to be readily determined.

R18-12-242. Release Detection for Hazardous Substance UST Systems

- A. Owners and operators of existing hazardous substance UST systems shall provide release detection that meets the requirements for petroleum UST systems in R18-12-241. By December 22, 1998, each existing hazardous substance UST system shall be upgraded to meet the release detection requirements for new hazardous substance UST systems in subsection (B).
- B. Owners and operators of a new hazardous substance UST system shall provide release detection which meets the following requirements:
 1. Secondary containment systems shall be designed, constructed, and installed to meet all of the following requirements:
 - a. Contain regulated substances released from the UST system until they are detected and removed.
 - b. Prevent the release of regulated substances to the environment at any time during the operational life of the UST system.
 - c. Be checked for evidence of a release at least monthly.
 2. Double-walled tanks shall be designed, constructed, and installed to meet both of the following requirements:
 - a. Contain a release from any portion of the inner tank within the outer wall.
 - b. Detect the failure of the inner wall.
 3. External liners, including vaults, shall be designed, constructed, and installed to meet all of the following requirements:
 - a. Contain 100% of the capacity of the largest UST system within its boundary.
 - b. Prevent the interference of precipitation or ground-water intrusion with the ability to contain or detect a release of regulated substances.
 - c. Surround the tank completely so that it is capable of preventing lateral as well as vertical migration of regulated substances.
 4. Underground piping shall be equipped with secondary containment that satisfies the requirements of subsection (B)(1) and underground piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector in accordance with R18-12-244(A).
 5. Methods of release detection other than those described in subsections (B)(1) through (4) may be used if owners and operators meet all of the following requirements:
 - a. Demonstrate to the Department that an alternate

method can detect a release of the stored substance as effectively as any of the methods allowed in R18-12-243(B) through (H) can detect a release of petroleum;

- b. Provide information to the Department on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site;
- c. Obtain approval from the Department in writing to use the alternate release detection method before the installation and operation of the UST system.

R18-12-243. Methods of Release Detection for Tanks

- A. If inventory control is used to meet the requirements of R18-12-241, it shall be used in conjunction with tank tightness testing described in subsection (C). Inventory control shall be conducted monthly in accordance with R18-12-281(O) to detect a release of at least 1.0% of flow-through plus 130 gallons on a monthly basis in the following manner:
 1. Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day;
 2. The equipment used is capable of measuring the level of the regulated substance over the full range of the tank's vertical dimension to the nearest 1/8 of an inch;
 3. The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;
 4. Measurements, as well as deliveries of regulated substances, are made through a drop tube that extends to within 1 foot of the tank bottom;
 5. Dispensing of regulated substances is metered and recorded within the standards established by the entity with jurisdiction. If no standards are established, dispensing which meets an accuracy of 6 cubic inches for every 5 gallons of regulated substance withdrawn shall be used;
 6. The measurement of any water level in the bottom of the tank is made to the nearest 1/8 of an inch at least once a month;
 7. Inventory control shall not be utilized as the sole method of release detection.
- B. Manual tank gauging used to meet the requirements of R18-12-241 shall meet all of the following requirements:
 1. Tank liquid level measurements are taken on a weekly basis at the beginning and ending of a period of at least 36 hours during which no liquid is added to or removed from the UST system;
 2. Level measurements are based on an average of 2 consecutive stick readings at both the beginning and ending of the period;
 3. The equipment used is capable of measuring the level of regulated substance over the full range of the tank's vertical dimension to the nearest 1/8 of an inch;
 4. A leak is suspected and subject to the requirements of A.R.S. § 49-1004 and the rules promulgated thereunder if the statistical variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table:

Nominal	Weekly Standard	Monthly Standard
Tank Capacity	(1 test)	(average of 4 tests)
550 gallons or less	10 gallons	5 gallons
551-1,000 gallons	13 gallons	7 gallons
1,001-2,000 gallons	26 gallons	13 gallons
 5. Manual tank gauging may be used as the sole method of release detection only for tanks of 550 gallons or less capacity. Manual tank gauging may be used in place of

Arizona Administrative Register
Notices of Final Rulemaking

inventory control in subsection (A), for tanks of 551 to 2,000 gallons. This method shall not be used to meet the requirements of R18-12-241 for tanks of greater than 2,000 gallons capacity.

C. If tank tightness testing is used to meet the requirements of R18-12-241, it shall be used in conjunction with the inventory control method described in subsection (A) or the manual tank gauging method described in subsection (B) and shall be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank that routinely contains regulated substance while accounting for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

D. Equipment for automatic tank gauging that tests for the loss of regulated substance and conducts inventory control used to meet the requirements of R18-12-241 shall meet both of the following requirements:

1. The automatic regulated substance level monitor test shall be performed at least monthly and be capable of detecting a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains regulated substance.
2. Inventory control shall be conducted in accordance with the requirements of subsection (A).

E. Testing or monitoring for vapors within the soil gas of the excavation zone used to meet the requirements of R18-12-241 shall be conducted at least monthly and shall meet all of the following requirements:

1. The characteristics of the site are assessed to ensure that the leak detection method will comply with the requirements in subsections (E)(2) through (8);
2. The leak detection system is constructed and designed so that the number and positioning of monitoring wells will detect releases into the excavation zone from any portion of the system which routinely contains a regulated substance within 30 days from the date of commencement of a release;
3. The stored regulated substance, or a tracer compound placed in the UST system, will produce a vapor level that is detectable by the monitoring devices in the monitoring wells, within 30 days from the date of commencement of a release from the UST system;
4. The materials used as backfill will allow diffusion of vapors from releases into the excavation area such that a release is detected within 30 days from the date of commencement of a release from the UST system;
5. The groundwater, rainfall, soil moisture, or other known interferences will not render the measurement of vapors by the monitoring device inoperable so that a release could go undetected by the monitoring devices in the monitoring wells for more than 30 days from the date of commencement of the release from the UST system;
6. The level of background contamination at the site will not interfere with the method used to detect releases from the tank system;
7. The vapor monitors are designed and operated to detect any significant increase in concentration above a documented background level of the regulated substance stored in the tank system, a component or components of that substance, or a volatile tracer compound placed in the tank system;
8. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

F. Testing or monitoring for liquids on the groundwater used to meet the requirements of R18-12-241 shall be conducted monthly and meet the following requirements:

1. The characteristics of the site are assessed to ensure that the leak detection method will comply with the requirements in subsections (F)(2) through (9);
 2. The leak detection system shall be constructed and designed so that the number and positioning of monitoring wells or devices will detect releases into the excavation zone from any portion of the system which routinely contains a regulated substance;
 3. The regulated substance stored is immiscible in water and has a specific gravity of less than 1;
 4. Groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the material between the UST system and the monitoring wells or devices is not less than 0.01 centimeters per second;
 5. Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible;
 6. The slotted portion of the monitoring well casing shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low ground-water conditions;
 7. The continuous monitoring devices or manual methods used can detect the presence of at least 1/8 of an inch of free product on top of the groundwater in the monitoring wells;
 8. Monitoring wells shall be sealed from the ground surface to the top of the filter pack;
 9. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.
- G. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it which is used to meet the requirements of R18-12-241 shall be conducted at least monthly and shall be designed, constructed and installed to detect a leak from any portion of the UST system that routinely contains a regulated substance, and shall meet 1 of the following requirements:
1. For double-walled UST systems, the sampling or testing method shall be able to detect a release through the inner wall in any portion of the UST system that routinely contains a regulated substance.
 2. For UST systems with a secondary barrier within the excavation zone, characteristics of the site and system components shall be designed and constructed to detect a release between the UST system and the secondary barrier and shall meet all of the following requirements:
 - a. The secondary barrier around or beneath the UST system shall be constructed of synthetic materials which are sufficiently thick and impermeable to prevent structural weakening of the secondary barrier as a result of contact with any released regulated substance. The rate of permeability shall not exceed 10^{-6} centimeters per second for the regulated substance stored. In addition, the secondary barrier shall be capable of directing any release to the monitoring point and permit its detection;
 - b. The barrier is compatible with the regulated substance stored so that a release from the UST system will not cause a deterioration of the barrier allowing a release to pass through undetected;
 - c. For cathodically protected UST systems, the secondary barrier shall be installed so that it does not interfere with the proper operation of the cathodic protection system;
 - d. The groundwater, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a release could go undetected for more

Notices of Final Rulemaking

- e. than 30 days;
- e. The characteristics of the UST site are assessed to ensure that the secondary barrier is always above the groundwater and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions;
- f. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.
- 3. For tanks with an internally fitted liner, an automated device shall be able to detect a release between the inner wall of the tank and the liner, and the liner shall be compatible with the substance stored.

H. Any other type of release detection method, or combination of methods, may be used to meet the requirements of R18-12-241 if all of the following requirements are met:

- 1. The monitoring is conducted at least monthly;
- 2. The Department determines that the method meets either of the following requirements:
 - a. The method can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within 30 days with probability of detection and probability of false alarm in accordance with R18-12-240(A)(4);
 - b. Owners and operators can demonstrate that the method is able to detect a release as effectively as any of the methods allowed in subsections (C) through (G). In comparing methods, the Department shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, owners and operators shall comply with any conditions imposed by the Department on its use to ensure the protection of human health and the environment.

R18-12-244. Methods of Release Detection for Piping

- A. An automatic line leak detection method for piping used to meet the requirements of R18-12-241 which alerts the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if it detects leaks of 3 gallons per hour, at 10 pounds per square inch line pressure within 1 hour. An annual test of the operation of the leak detector shall be conducted in accordance with the manufacturer's requirements;
- B. A periodic line tightness test of piping may be used as a method of release detection for piping for the purpose of meeting the requirements of R18-12-241 only if it can detect a 0.1 gallon per hour leak rate, at 1½ times the operating pressure.
- C. Any of the applicable tank methods described in R18-12-243(E) through (H) may be used as a method of release detection for piping for the purpose of meeting the requirements of R18-12-241 if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

R18-12-245. Release Detection Recordkeeping

- A. Owners and operators shall maintain records in accordance with R18-12-234 demonstrating compliance with all applicable requirements of R18-12-240 through R18-12-244. The following records shall be maintained for the operational life of the release detection system or 5 years from the date indicated below, whichever is the shorter time period:
 - 1. All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or the installer. The retention period shall start at the date of installation;
 - 2. Written documentation of all calibration, maintenance,

and repair of release detection equipment permanently located on-site. The retention period shall start at the date of completion of the servicing work.

- B. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be maintained for at least 5 years from the date of installation.
- C. Except as otherwise provided in subsection (D), the results of any sampling or testing shall be maintained for at least 5 years from the date of receipt by owners and operators of the results.
- D. The results of tank tightness testing conducted in accordance with R18-12-243(C) shall be retained from the date of receipt by owners and operators of the results until the next test is conducted and the results of that test are received.
- E. Results of any monitoring shall be maintained for at least 1 year from the date of receipt by owners and operators of the monitoring results.

R18-12-250. Reserved

R18-12-251. Reserved

R18-12-252. Reserved

R18-12-253. Reserved

R18-12-254. Reserved

R18-12-255. Reserved

R18-12-256. Reserved

R18-12-257. Reserved

R18-12-258. Reserved

R18-12-259. Reserved

R18-12-260. Reserved

R18-12-261. Reserved

R18-12-262. Reserved

R18-12-263. Reserved

R18-12-264. Reserved

R18-12-265. Reserved

R18-12-270. Temporary Closure

- A. Owners shall notify the Department in accordance with R18-12-222(F)(4) within 30 days of the date that an UST system is temporarily closed.
- B. Owners and operators of a temporarily closed UST system shall continue operation and maintenance of corrosion protection in accordance with R18-12-231, and release detection in accordance with R18-12-240 through R18-12-245. Discovery of a release or suspected release shall be subject to the provisions of R18-12-274. Release detection is not required if the temporarily closed UST system is emptied of all regulated substances and accumulated residues. The UST system is empty when all contents have been removed from the system so that no more than 2.5 centimeters (1 inch) of residue or 0.3% by weight of the total capacity of the UST system remain in the system. Spill and overfill requirements in accordance with R18-12-220(D), R18-12-221(E) and R18-12-230 do not have to be met during temporary closure.
- C. Owners and operators of any UST system which is temporarily closed for 3 months or more shall also comply with both of the following requirements before the end of the 3rd month following the date on which the UST system began temporary closure:
 - 1. Vent lines left open and functioning;

Arizona Administrative Register
Notices of Final Rulemaking

2. All other lines, pumps, manways, and ancillary equipment capped and secured in accordance with R18-12-281(P)(1).
- D. To bring an UST system back into use, owners shall notify the Department in accordance with R18-12-222(F)(5) within 30 days after the date that the UST system is brought back into use.
- E. Any temporarily closed UST system that cannot be brought back into service within 12-months from the date it went into temporary closure, shall comply with 1 of the following before the expiration of the 12-month period:
1. Permanently close the system in accordance with R18-12-271 through R18-12-274.
 2. Obtain an extension of temporary closure from the Department in accordance with subsection (G). To be effective, such an extension shall be granted in writing by the Department prior to expiration of the initial 12-month period of temporary closure.
- F. A request for an extension shall be made by the owner using the Notification Form as described in R18-12-222(C)(3). The request shall include the results of a site assessment conducted in accordance with R18-12-272. A site assessment is not required if the UST system meets the new system standards of R18-12-220 or the upgrade standards of R18-12-221 provided both of the following are met:
1. The system has had corrosion protection installed in accordance with R18-12-220(B) and (C) or R18-12-221(B) and (C) which has been maintained in accordance with R18-12-231.
 2. The system has had an external leak detection system installed in accordance with R18-12-243(E) or R18-12-243(F) which has been maintained in accordance with R18-12-240.
- G. Owners requesting an extension of temporary closure shall submit the request in accordance with subsection (F) no later than 30 days prior to the expiration of the 12-month period of temporary closure. The Department shall inform the owner, in writing by certified mail, if the extension request is granted or denied. The UST shall be considered to be in extended temporary closure until the Department's determination is made and the owner is informed in writing. An extension of temporary closure which is granted by the Department shall include the duration and the terms and conditions of the extension. Terms and conditions shall be based upon the Department's assessment of what is reasonably necessary to protect human health and the environment. When the request for extension is denied, the UST system shall complete permanent closure in accordance with R18-12-271 through R18-12-274 or return to active service within 180 days of the date on which the Department informed the owner of the denial of the extension request, as evidenced by the return receipt. In the event of a denial of a request for an extension, the UST shall be considered to be in extended temporary closure until the 180 day period following notice of the denial has elapsed.
- R18-12-271. Permanent Closure and Change-in-Service**
- A. At least 30 days before beginning permanent closure or a change-in-service under subsection (C), owners and operators shall inform the Department in writing of their intent to permanently close or make a change-in-service of an UST. If closure or change-in-service is not completed within 6 months from the date the Department is informed, the information is deemed to be expired. Owners and operators shall provide the Department with all of the following information:
1. UST system owner name, address, and telephone number;
 2. Facility name or company site identifier;
 3. Facility street address;
 4. Description of each UST system to be closed, including date of installation, total capacity, and construction material;
 5. The estimated date of permanent closure or change-in-service.
- B. The Department shall waive the 30-day notice described in subsection (A) if the permanent closure is in response to a corrective action conducted under A.R.S. § 49-1005 which was reported under A.R.S. § 49-1004. In addition, the Department may determine another reasonable time period for the notice of intent to permanently close or make a change-in-service to the UST system if any of the following exist:
1. An emergency that threatens human health or the environment.
 2. The Department agrees to a request made by an entity operating under an Intergovernmental Agreement with the Department delegating closure inspection authority.
- C. To permanently close or make a change-in-service to an UST system, owners and operators shall comply with R18-12-281(P) and shall perform all of the following steps:
1. Develop documented evidence that the contents of the system are a regulated substance. Unless system contents can be documented through delivery receipts or knowledge of process, a waste determination in accordance with R18-8-261(A) shall be performed. If contents are not a regulated substance, they may be subject to hazardous, solid or special waste regulations as follows:
 - a. If the contents of an UST system are determined to meet the definition of a hazardous waste based upon a waste determination, the contents may be subject to the requirements of A.R.S. §§ 49-901 et seq. and the rules promulgated thereunder;
 - b. If the contents of an UST system are not a regulated substance and not a hazardous waste, the contents may be subject to the requirements of R18-8-511 and R18-8-512.
 2. Drain and flush back into the tank regulated substances from piping and any other ancillary equipment that routinely contains regulated substances. All piping, dispensers, and other ancillary equipment to be closed shall be capped or removed;
 3. Empty to the standard set forth in R18-12-270(B) and clean the UST by removing all liquids and accumulated residues. The liquids and accumulated residues which meet the definition of hazardous waste pursuant to A.R.S. § 49-921(5) may be subject to regulation under A.R.S. §§ 49-901 et seq. If the liquids and accumulated residues are not hazardous waste, they may be subject to regulation pursuant to A.R.S. §§ 49-701 et seq;
 4. Remove from the ground or fill completely with inert solid materials all tanks permanently taken out-of-operation unless the UST system component is making a change-in-service;
 5. Perform the site assessment at closure or change-in-service in accordance with R18-12-272. The site assessment shall be performed after informing the Department but prior to completion of the permanent closure or change-in-service. If the tank is removed, samples shall be taken at the time of removal.
- D. Owners and operators who permanently close or make a change-in-service of an UST system shall prepare a closure report in a format provided by the Department. The closure report shall be submitted to the Department within 30 days of the completion of closure or change-in-service. The report shall be maintained by the Department for at least 3 years from

Arizona Administrative Register
Notices of Final Rulemaking

the date of receipt as evidenced by the post mark or the date stamped on the document by the Department. The report shall demonstrate compliance with the requirements of this Section and R18-12-272. In addition, the report shall include all of the following:

1. The name of the facility owner and operator, facility name and address, facility identification number, and a certification statement signed by the UST owner or operator or the authorized agent of the owner or operator that reads: "I hereby certify, under penalty of law, that this submittal and all attachments were prepared under my direction and supervision, and that the information submitted is true, accurate, and complete to the best of my knowledge."
2. Information concerning the required soil sampling, conducted in accordance with R18-12-272, which shall include the rationale for selecting sample types, sample locations, and measurement methods and, for each sample, all of the following: sample location identification number; sample depth; sampling date; date of laboratory analysis; lithology of sample; field soil vapor readings, if obtained; analytical methods used; laboratory results; numerical detection limits; and all sampling quality assurance and quality control results;
3. Information concerning the required water sampling, conducted in accordance with R18-12-280, which shall include, for each sample, all of the following: sample location identification number; sampling date; date of laboratory analysis; laboratory results; analytical methods used; numerical detection limits; and all sampling quality assurance and quality control results;
4. Copies of all original laboratory reports and chain-of-custody forms, and any supporting laboratory documents which discuss any analytical quality assurance and quality control anomalies experienced by the laboratory. The laboratory reports shall include, for each sample, all of the following: analytical methods; sample collection date; extraction date; sample analysis date; laboratory detection limits; and all analytical quality assurance and quality control analyses conducted by the laboratory for or during the analyses of the subject samples;
5. A brief, site-specific narrative description of the sampling quality assurance and quality control program followed in the field in accordance with R18-12-280(B). Any sampling quality assurance and quality control anomalies shall be discussed in detail. The report shall include a determination as to the validity of the data from a scientific standpoint;
6. A scaled map showing the locations of the tank, piping, and dispensers and the locations of all samples obtained in accordance with R18-12-272.

R18-12-272. Assessing the UST Site at Closure or Change-in-Service

- A.** Before permanent closure or a change-in-service is completed, owners and operators shall measure for the presence of a release at the UST site by taking samples for laboratory analysis. Samples shall be obtained in the areas where contamination would most likely occur, or where stained soils, odors, vapors, free product, or other evidence indicates that a release may have occurred. Measurement for presence of a release shall be performed according to all of the following:
1. Owners and operators shall document the environmental condition of the UST site and the presence or absence of any contamination resulting from the operation of the UST system at the site through analyses performed on samples of native soil, and of water encountered during

the UST closure assessment;

2. Specific locations for the required sampling at the UST system site shall be determined by the presence of stained soils, odors, vapors, free product, or other evidence indicating that a release may have occurred. In selecting sample types, sample locations, and measurement methods, owners and operators shall also consider the method of closure, the nature of the stored substance, the type of backfill, the depth to groundwater, and other factors which may identify the presence of a release. At a minimum, each site shall be sampled in accordance with the following:
 - a. If water is not present in the excavation at the time an UST is removed or if the UST is filled with a solid inert material as described in R18-12-271(C)(4), a minimum of 2 distinct soil samples shall be taken from native soils beneath each tank that has a capacity to hold more than 550 gallons. The samples shall be taken from beneath each end of each tank. In cases where the fill pipe or pump is located above the center of the tank, an additional sample shall be taken from beneath the center of the tank. If the capacity of the tank is 550 gallons or less, then 1 sample shall be taken from native soils beneath the center of the tank;
 - b. If water is present above the floor of the excavation at the time an UST is removed, distinct samples of native soils shall be taken from the walls of the excavation at the soil-water interface at both ends of the tank;
 - c. If native soil cannot be collected in accordance with R18-12-280 due to large clast size or induration, or if the excavation zone is constructed in bedrock 1 of the following shall be performed:
 - i. Samples of the UST excavation backfill material shall be collected from beneath the UST system in accordance with locations described in subsection (A)(2)(a).
 - ii. If the UST excavation backfill material cannot be sampled, the Department shall be contacted for further instruction.
 - d. If water is encountered during activities required under this Section, a sample of the water shall be collected for analysis. If a sheen or free product is observed on the water or in the sample, the sampling requirements of subsection (A)(2) do not have to be met, however, further reporting and investigation shall be conducted in accordance with R18-12-274;
 - e. If piping is permanently closed in accordance with R18-12-271(C)(2) distinct samples of native soil shall be collected every 20 linear feet along the piping trench. In addition, distinct samples of native soil shall be collected under elbows, joints, fittings, dispensers and areas of corrosion;
 - f. Stockpiled excavated soil shall be sampled in accordance with A.R.S. Title 49, Chapter 4, Article 9, and the rules promulgated thereunder.
 3. All required sampling shall be performed in accordance with R18-12-280.
- B.** The requirements of this Section are satisfied if owners and operators document all of the following:
1. The UST system is monitored by 1 of the external release detection methods described in R18-12-243(E) or (F).
 2. The release detection system has been operated in accordance with the requirements of R18-12-240.
 3. The release detection system indicates no releases have

Arizona Administrative Register
Notices of Final Rulemaking

occurred.

R18-12-273. Application of Closure Requirements to Previously Closed Systems

When directed to do so by the Department, owners and operators of an UST system which was permanently closed before December 22, 1988, shall assess the excavation zone and close the UST system in accordance with R18-12-271, R18-12-272, and R18-12-274 if known, suspected, or potential releases from the UST system, in the judgment of the Department, may pose a current or potential threat to human health or the environment.

R18-12-274. Release Reporting and Corrective Action for Closed Systems

If a release or suspected release is discovered during temporary closure under R18-12-270 or in the performance of the procedures described in R18-12-272(A), owners and operators shall report the release and perform corrective action as required under A.R.S. §§ 49-1004 and 49-1005 and the rules promulgated thereunder.

R18-12-280. Sampling Requirements

A. The following analytical procedures shall be performed for all required sampling:

1. Samples shall be analyzed for the components of the regulated substances stored in the UST during its operational life by analytical test methods that are approved in accordance with A.A.C. R9-14-601 through R9-14-617 except that soil samples which are to be analyzed for the possible presence of volatile regulated substances shall be subject to 1 of the following procedures unless a shorter extraction time is specified by the analytical method:

- a.** Laboratory extraction occurs within 72 hours of collection, unless site-specific pre-approval to extend the time to 120 hours has been granted by the Department;
- b.** Field extraction is made using methanol immersion;
- c.** A purge and trap modified adapter is used;
- d.** The Department may approve, prior to obtaining samples, other procedures which have been determined by the Department to result in analytical data representative of the concentrations and compositions of volatile regulated substances actually present in the soil.

2. Sample analyses shall be performed by a laboratory licensed for the selected methodology by the Arizona Department of Health Services in accordance with A.A.C. R9-14-601 through R9-14-617.

3. Samples shall be analyzed within the specified time period required for the analytical test method in accordance with A.A.C. R9-14-601 through R18-12-617.

B. The following quality assurance and quality control procedures shall be performed for all required sampling:

- 1.** All sampling equipment shall be decontaminated using procedures set forth in R18-12-281(Q);
- 2.** Samples shall be immediately labeled, sealed in a plastic bag, and placed in a cooler on ice in accordance with R18-12-281(R)(1) and (2) and A.A.C. R9-14-601 through R9-14-617;
- 3.** Chain-of-custody procedures shall be followed, in accordance with subsection R18-12-281(S), for all sampling. In addition, condition and temperature of the samples as received by the laboratory shall be included on the chain-of-custody record.

C. All soil sampling required under R18-12-272 shall be conducted in accordance with R18-12-281(R)(2). If regulated substances stored in the UST system at any time during the life of the system include volatile regulated substances, samples shall

be obtained with minimal loss of volatile regulated substances in accordance with R18-12-281(R)(1). Samples of volatile regulated substances obtained through excavation shall be collected by driving a clean metal ring, metal cylinder, or a sleeve which is composed of an inert material such as Teflon, stainless steel, or brass into the center of the soil in the backhoe or trackhoe bucket immediately after the soil is lifted from the bottom of the excavation. The Department may approve, prior to obtaining samples, other procedures for sampling which have been determined by the Department to result in analytical data representative of the concentrations and compositions of volatile regulated substances actually present in the soil.

D. All water sampling required under R18-12-272 shall be collected in accordance with A.A.C. R9-14-601 through R9-14-617.

R18-12-281. UST System Codes of Practice and Performance Standards

A. Compliance with R18-12-211(B) shall be determined by utilization of The National Association of Corrosion Engineers Standard RP0285-85, "Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems" amended as of 1985 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

B. Compliance with R18-12-220(B)(1) shall be determined by utilization of 1 of the following:

- 1.** Underwriters Laboratories Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products" July 1983, and amended May 1991 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
- 2.** Underwriters Laboratories of Canada CAN4-S615-M83, "Standard for Reinforced Plastic Underground Tanks for Petroleum Products" February 1983 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
- 3.** American Society for Testing and Materials Standard D 4021-86, "Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks" amended July 25, 1986 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

C. Compliance with R18-12-220(B)(2) shall be determined by utilization of 1 of the following:

- 1.** Steel Tank Institute, "Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks" amended as of November 1, 1989 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
- 2.** Underwriters Laboratories Standard 1746, "External Corrosion Protection Systems for Steel Underground Storage Tanks" amended November 7, 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
- 3.** Underwriters Laboratories of Canada CAN/ULC-S603.1-92, "Standard for Galvanic Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids" amended as of September 1992 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office

Notices of Final Rulemaking

- of the Secretary of State and Underwriters Laboratories of Canada CAN4-S631-M84, "Standard for Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems" amended as of October 1992 (and no future amendments or editions), which are incorporated by reference and are on file with the Department and the Office of the Secretary of State;
4. National Association of Corrosion Engineers Standard RP0285-85, "Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems" and Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids" amended as of August 3, 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- D.** Compliance with R18-12-220(B)(3) shall be determined by utilization of 1 of the following:
1. Underwriters Laboratories Standard 1746, "External Corrosion Protection Systems for Underground Storage Tanks" (November 7, 1990);
 2. Steel Tank Institute ACT-100, "Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks" amended as of March 6, 1991 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- E.** Compliance with R18-12-220(C)(1) shall be determined by utilization of all of the following:
1. Underwriters Laboratories Subject 971, "Standard for NonMetallic Underground Piping for Flammable Liquids" March 17, 1992 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. Underwriters Laboratories Standard 567, "Pipe Connectors for Flammable and Combustible Liquids and LP Gas" amended as of May 29, 1991 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 3. Underwriters Laboratories of Canada Subject C-107C-M1984, "Guide for Glass Fibre Reinforced Plastic Pipe and Fittings for Flammable Liquids" June 1984 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
 4. Underwriters Laboratories of Canada Standard CAN/ULC-S633-M90, "Standard for Flexible Underground Hose Connectors for Flammable and Combustible Liquids" amended as of June 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- F.** Compliance with R18-12-220(C)(2) shall be determined by utilization of all of the following:
1. National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code" amended as of August 17, 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems" amended as of November 1987, Supplement March 6, 1989 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
3. American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems" amended as of December 1987, Supplement March 6, 1989 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 4. National Association of Corrosion Engineers Standard RP0169-92, "Standard Recommended Practice Control of External Corrosion on Underground or Submerged Metallic Piping Systems"-1983, amended as of 1992 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- G.** Compliance with R18-12-220(C)(3)(b) shall be determined by utilization of both of the following:
1. National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code" (August 17, 1990);
 2. National Association of Corrosion Engineers Standard RP0169-92, "Control of External Corrosion on Submerged Metallic Piping Systems" (1992).
- H.** Compliance with R18-12-220(E)(2) shall be determined by utilization of 1 of the following:
1. American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems" November 1987, Supplement March 6, 1989;
 2. Petroleum Equipment Institute Publication PEI/RP100-90, "Recommended Practices for Installation of Underground Liquid Storage Systems" amended as of 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 3. American National Standards Institute Standard B31.3, "Chemical Plant and Petroleum Refinery Piping" amended as of 1993 with Addenda (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State, and American National Standards Institute Standard B31.4, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols" 1992 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- I.** Compliance with R18-12-221(D) shall be determined by utilization of all of the following:
1. American Petroleum Institute Publication 1631, "Interior Lining of Underground Storage Tanks" amended as of April 1992, October 1995 addendum (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10-year Life Extension of Existing Steel Underground Storage Tanks By Lining Without the Addition of Cathodic Protection" amended as of September 1988 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 3. National Association of Corrosion Engineers Standard RP0285-85, "Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried,

Notices of Final Rulemaking

- or Submerged Liquid Storage Systems" (1985).
4. American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping System" (December 1987, Supplement March 6, 1989.)
- J. Compliance with R18-12-230(A) shall be determined by utilization of 1 of the following:
 1. National Fire Protection Association Publication 385, "Standard for Tank Vehicles for Flammable and Combustible Liquids" amended as of 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. American Petroleum Institute Publication 1621, "Bulk Liquid Stock Control At Retail Outlets" December 1987, Supplement March 6, 1989 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State, and National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code" (August 17, 1990).
- K. Compliance with R18-12-231(B)(2) shall be determined by utilization of National Association of Corrosion Engineers Standard RP0285-85, "Standard Recommended Practice Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems" (1985).
- L. Compliance with R18-12-232 shall be determined by utilization of both of the following:
 1. American Petroleum Institute Publication 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations" April 1985 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. American Petroleum Institute Publication 1627, "Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations" August 1986 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- M. Compliance with R18-12-233(A)(1) shall be determined by utilization of all of the following:
 1. National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code" (August 17, 1990);
 2. American Petroleum Institute Publication 2200, "Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines" amended as of April 1983 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 3. American Petroleum Institute Publication 1631, "Interior Lining of Underground Storage Tanks" (December 1987);
 4. National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10-year Life Extension of Existing Underground Storage Tanks By Lining Without the Addition of Cathodic Protection" (September 1988).
- N. Compliance with R18-12-233(A)(2) shall be determined by utilization of Fiberglass Petroleum Tank & Piping Institute T-90-01 "Remanufacturing of Fiberglass Reinforced Plastic (RFP) Underground Storage Tanks" July 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- O. Compliance with R18-12-243(A) shall be determined by utilization of American Petroleum Institute Publication 1621, "Bulk Liquid Stock Control At Retail Outlets" (December 1987, Supplement March 6, 1989).
- P. Compliance with R18-12-271(C) shall be determined by utilization of all of the following:
 1. American Petroleum Institute Publication 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks" amended as of December 1987, Supplement March 6, 1989 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. American Petroleum Institute Publication 2015, "Safe Entry and Cleaning Petroleum Storage Tanks" amended as of January 1991 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 3. American Petroleum Institute Publication 1631, "Interior Lining of Underground Storage Tanks" (April 1992).
 4. The National Institute for Occupational Safety and Health Publication 80-106, "Criteria for a Recommended Standard... Working in Confined Spaces" amended as of December 1979 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- Q. Compliance with R18-12-280(B)(1) shall be determined by utilization of American Society for Testing and Materials Standard D 5088-90, "Practice for Decontamination of Field Equipment Used at Nonradioactive Waste Sites" revised as of June 29, 1990 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- R. Compliance with R18-12-280(B)(2) and (C) shall be determined by utilization of both of the following:
 1. American Society for Testing and Materials Standard D 4547-91: "Standard Practice for Sampling Waste and Soils for Volatile Organics" revised as of August 15, 1991 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State;
 2. American Society for Testing and Materials Standard D 4700-91, "Standard Guide for Soil Sampling from the Vadose Zone" revised as of July 15, 1991 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- S. Compliance with R18-12-280(B)(3) shall be determined by utilization of American Society for Testing and Materials Standard D 4840-88, "Standard Practice for Sampling Chain of Custody Procedures" approved June 1988 and published in October 1988, re-approved as of 1993 (and no future amendments or editions), which is incorporated by reference and on file with the Department and the Office of the Secretary of State.

ARTICLE 3. FINANCIAL RESPONSIBILITY

R18-12-300. Financial Responsibility; Applicability

- A. R18-12-301 through R18-12-324 R18-12-325 apply to all owners and operators of petroleum UST systems, except as otherwise provided in this Section.
- B. An owner and operator Owners and operators of a petroleum UST system are subject to the requirements of R18-12-301 through R18-12-324 R18-12-325 if the petroleum UST system is being used on the effective date of this Section, or anytime thereafter.

Notices of Final Rulemaking

- C. State and federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States are exempt from the requirements of this Article.
- D. R18-12-303 through ~~R18-12-321~~ R18-12-325 do not apply to ~~the owner and operator~~ owners and operators of any UST system excluded or deferred from under 40 CFR 280.10(b) or 40 CFR 280.10(c) as described in A.R.S. § 49-1021. 40 CFR 280.10(b) and 40 CFR 280.10(c), amended as of July 1, 1994 (and no future amendments or editions), is incorporated herein by reference and is on file with the Department of Environmental Quality and the Office of the Secretary of State.
- E. If ~~the owner and operator~~ owners and operators of a petroleum underground storage tank are separate persons, only 1 one person is required to demonstrate financial responsibility; however, both parties are liable in event of noncompliance. Regardless of which party complies, the date set for compliance at a particular facility is determined by the characteristics of the owner as set forth in R18-12-301.

R18-12-301. Financial Responsibility; Compliance Dates; Allowable Mechanisms; Evidence

- A. Owners and operators shall submit to the Department evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this Article for an underground storage tank as follows:
 - 1. All petroleum marketing firms owning 1,000 or more USTs and all other UST owners that report a tangible net worth of \$20 million or more to the U.S. Securities and Exchange Commission (SEC), Dun and Bradstreet, the Energy Information Administration, or the Rural Electrification Administration: within 180 days after the effective date of this Section;
 - 2. All petroleum marketing firms owning 100-999 USTs: within 180 days after the effective date of this Section;
 - 3. All petroleum marketing firms owning a total of 13-99 USTs ~~at more~~ which are located at more than 1 one facility: within 180 days after the effective date of this Section;
 - 4. All petroleum UST owners not described in subsections (A)(1) through (3) ~~paragraphs (1) through (3) above~~, excluding all local government entities: by December 31, 1993;
 - 5. All local government entities: 1 one year from the date of final federal promulgation of additional mechanisms for use by local government entities to comply with financial responsibility requirements for underground storage tanks containing petroleum.
- B. ~~An owner and operator shall submit any one or combination of the assurance mechanisms specified in R18-12-305 through R18-12-309 and R18-12-312 to comply with the requirements of this Article and shall submit to, and maintain with, the Department a copy of the instrument(s) currently in effect along with a copy of the standby trust agreement, if required.~~
 - 1. ~~An owner and operator using a financial test or guarantee shall submit a copy of the chief financial officer's letter based on year end financial statements for the most recently completed financial reporting year.~~
 - 2. ~~An owner and operator using a guarantee, surety bond, or letter of credit shall submit, in addition to the appropriate assurance mechanism, a copy of the signed standby trust agreement and copies of any amendments to the agreement, as worded in 40 CFR 280.103. 40 CFR 280.103, as amended July 1, 1991 (and no future editions), is incorporated herein by reference and is on file with the Department of Environmental Quality and the Office of the Secretary of State.~~
 - 3. ~~An owner and operator using an insurance policy or risk~~

~~retention group coverage shall submit a copy of the signed insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendment to the agreements.~~

- 4. ~~An owner and operator who chooses to utilize an approved state fund shall submit a copy of any evidence of coverage supplied by the Department at such time as the state fund is approved by the EPA.~~
- 5. ~~An owner and operator using an assurance mechanism specified in R18-12-305 through R18-12-309 and R18-12-312 shall submit a copy of the instrument worded as specified in 40 CFR 280.95 through 280.99 and 280.102. 40 CFR 280.95 through 280.99 and 40 CFR 280.102, as amended as of July 1, 1991 (and no future editions), are incorporated herein by reference and are on file with the Department of Environmental Quality and the Office of the Secretary of State.~~
- 6. ~~An owner and operator using an assurance mechanism specified in R18-12-305 through R18-12-309 and R18-12-312 shall submit to, and maintain with, the Department an updated copy of a certification of financial responsibility worded as provided in 40 CFR 280.107(b)(6), except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.107(b)(6), as amended as of July 1, 1991 (and no future editions), is incorporated herein by reference and is on file with the Department of Environmental Quality and the Office of the Secretary of State.~~
- B. Owners and operators shall use the financial assurance mechanisms in this Article to comply with financial responsibility requirements as follows:
 - 1. Owners and operators, including local government owners and operators, may use any 1 or combination of the financial assurance mechanisms listed in R18-12-305 through R18-12-312 to demonstrate financial responsibility under this Article for 1 or more underground storage tanks;
 - 2. Local government owners and operators may also use any 1 or combination of the financial assurance mechanisms listed in R18-12-314 through R18-12-317 to demonstrate financial responsibility under this Article for 1 or more underground storage tanks.
- C. Owners and operators shall submit evidence of compliance with the requirements of this Article. Owners and operators shall submit to, and maintain with, the Department a copy of any 1 or combination of the assurance mechanisms specified in R18-12-305 through R18-12-312, and R18-12-314 through R18-12-317 currently in effect along with a copy of the standby trust agreement, if required. Owners and operators using an assurance mechanism specified in R18-12-305 through R18-12-312 and R18-12-314 through R18-12-317 shall submit to, and maintain with, the Department an updated copy of a certification of financial responsibility worded as provided in 40 CFR 280.111(b)(11)(i), except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.111(b)(11)(i), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State. In addition, local government owners and operators shall comply with 1 or more of the following:
 - 1. Local government owners and operators using the local government bond rating test under R18-12-314 shall submit a copy of its bond rating published within the last 12 months by Moody's or Standard & Poor's;
 - 2. Local government owners and operators using the local

Notices of Final Rulemaking

government guarantee under R18-12-316, if the guarantor's demonstration of financial responsibility relies on the bond rating test under R18-12-314 shall submit a copy of the guarantor's bond rating published within the last 12 months by Moody's or Standard & Poor's;

3. Local government owners and operators using a local government fund under R18-12-317 shall submit the following documents:

- a. A copy of the state constitutional provision or local government statute, charter, ordinance, or order dedicating the fund;**
- b. Year-end financial statements for the most recent completed financial reporting year showing the amount in the fund. If the fund is established under R18-12-317(A)(3) using incremental funding backed by bonding authority, the financial statements shall show the previous year's balance, the amount of funding during the year, and the closing balance in the fund;**
- c. If the fund is established under R18-12-317(A)(3) using incremental funding backed by bonding authority, owners and operators shall also submit documentation of the required bonding authority, including either the results of a voter referendum under R18-12-317(A)(3)(a), or attestation by the state attorney general as specified under R18-12-317(A)(3)(b).**

4. Local government owners and operators using the local government guarantee supported by the local government fund shall submit a copy of the guarantor's year-end financial statements for the most recent completed financial reporting year showing the amount of the fund.

D. Owners and operators shall maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this Article for an underground storage tank until released from the requirements of this Article under R18-12-323. Owners and operators shall maintain such evidence at the underground storage tank site or a readily available alternative site. Records maintained off-site shall be provided for inspection to the Department upon request.

R18-12-302. Reserved

R18-12-303. Amount and Scope of Required Financial Responsibility

- A. An owner and operator Owners and operators of petroleum USTs shall demonstrate financial responsibility for taking corrective action and for compensating 3rd parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum USTs in at least the following per-occurrence amounts:**
 - 1. For an owner and operator owners and operators of petroleum USTs that are located at petroleum marketing facilities, or that handle an average of more than 10,000 gallons of petroleum per month based on annual throughput for the previous calendar year: \$1 million;**
 - 2. For each owner and operator owners and operators of petroleum USTs not described in subsection (A)(1) paragraph 1: \$500,000.**
- B. An owner and operator Owners and operators of petroleum USTs shall demonstrate financial responsibility for taking corrective action and for compensating 3rd parties for bodily injury and property damage caused by accidental releases arising from the operation of a petroleum UST in at least the following annual aggregate amounts:**
 - 1. For an owner and operator owners and operators of 1 to 100 petroleum USTs: \$1 million,**

2. For an owner and operator owners and operators of 101 or more petroleum USTs: \$2 million.

- C. For the purposes of subsections (B) and (G) only, "a petroleum underground storage tank" means a single containment unit and does not mean combinations of single containment units.**
- D. Except as provided in subsection (E), if the owner and operator owners and operators use separate mechanisms or combinations of separate mechanisms to demonstrate financial responsibility for taking corrective action, compensating 3rd parties for bodily injury and property damage caused by sudden accidental releases, or compensating 3rd parties for bodily injury and property damage caused by nonsudden accidental releases, the amount of assurance provided by each mechanism or combination of mechanisms shall be in the full amount specified in subsections (A) and (B).**
- E. If an owner and operator owners and operators use separate mechanisms or combinations of separate mechanisms to demonstrate financial responsibility for different petroleum USTs, the annual aggregate required shall be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.**
- F. If an owner and operator owners and operators utilize 1 one mechanism, separate mechanisms, or combinations of separate mechanisms to demonstrate financial responsibility for petroleum USTs in more than 1 one state or territory, with more than 1 one implementing agency, the identification of systems covered by each mechanism shall include the implementing agency for each facility or group of facilities. All facilities subject to the requirements of this rule shall also be identified by the UST facility identification number assigned by the Department.**
- G. Each owner and operator Owners and operators shall review the amount of aggregate assurance provided whenever additional petroleum USTs are acquired or installed. If the number of petroleum underground storage tanks for which assurance shall be provided exceeds 100, the owner and operator owners and operators shall demonstrate financial responsibility in the amount of at least \$2 million of annual aggregate assurance by the anniversary of the date on which the mechanism demonstrating financial responsibility became effective. If assurance is being demonstrated by a combination of mechanisms, the owner and operator owners and operators shall demonstrate financial responsibility in the amount of at least \$2 million of annual aggregate assurance by the 1st-occurring effective date anniversary of any 1 one of the mechanisms combined, other than a financial test or guarantee, to provide assurance.**
- H. The amounts of assurance required under this Section exclude legal defense costs.**
- I. The per-occurrence and annual aggregate coverage amounts required by this Section do not limit the liability of the owner or operator owners and operators.**

R18-12-304. Reserved

R18-12-305. Financial Test of Self-insurance

- A. An owner, operator, or guarantor Owners, operators, or guarantors may satisfy the requirements of R18-12-303 by passing a financial test as specified in this Section. To pass the financial test of self-insurance, the owners, owner operators, operator or guarantors guarantor shall meet the criteria of either subsection (B) or (C) based on year-end financial statements for the latest completed fiscal year.**
- B. In order to pass a financial test of self-insurance under this subsection, an owner owners and operator operators, or guarantor guarantors shall meet all of the following requirements:**
 - 1. Have a tangible net worth of at least 10 ten times all of the following:**

Arizona Administrative Register
Notices of Final Rulemaking

- a. The total of the applicable aggregate amount required by R18-12-303, based on the number of underground storage tanks for which a financial test of self-insurance is used to demonstrate financial responsibility;
 - b. The sum of the corrective action cost estimates, the current closure and post-closure care cost estimates, and amount of liability coverage for which a financial test of self-insurance is used to demonstrate financial responsibility ~~to the Department~~ under R18-8-264;
 - c. The sum of current plugging and abandonment cost estimates for which a financial test of self-insurance is used to demonstrate financial responsibility ~~to EPA~~ under 40 CFR 144.63, 40 CFR 144.63, as amended as of July 1, ~~1994~~ 1994 (and no future amendments or editions), is incorporated ~~herein~~ by reference and is on file with the Department of ~~Environmental Quality~~ and the Office of the Secretary of State.
2. Have a tangible net worth of at least \$10 million,
 3. Have a letter signed by the chief financial officer worded as specified in subsection (D),
 4. Do either one of the following:
 - a. File financial statements annually with the U.S. Securities and Exchange Commission, the Energy Information Administration, or the Rural Electrification Administration.
 - b. Report annually the firm's tangible net worth to Dun and Bradstreet, and Dun and Bradstreet ~~must~~ shall have assigned the firm a financial strength rating of 4A or 5A.
 5. The firm's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.
- C. In order to pass a financial test of self-insurance under this subsection, ~~an owner owners, operator operators, or guarantor guarantors~~ shall meet all of the following requirements:
1. ~~The owner Owners, operator operators, or guarantor guarantors~~ shall meet the financial test requirements of 40 CFR 264.147(f)(1), substituting the appropriate amount specified in either R18-12-303(B)(1) or (2) for the "amount of liability coverage" each time specified in that Section. 40 CFR 264.147(f)(1), ~~as amended as of July 1, 1994~~ 1994 (and no future amendments or editions), is incorporated ~~herein~~ by reference and is on file with the Department of ~~Environmental Quality~~ and the Office of the Secretary of State;
 2. The fiscal year-end financial statements of ~~the owner owners, operator operators, or guarantor guarantors~~ shall be examined by an independent certified public accountant and be accompanied by the accountant's report of the examination;
 3. The firm's year-end financial statements cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification;
 4. ~~The owner Owners operator operators, or guarantor guarantors~~ shall have a letter signed by the chief financial officer, worded as specified in subsection (D);
 5. If the financial statements of ~~the owner owners, and operator operators, or guarantor guarantors~~ are not submitted annually to the U.S. Securities and Exchange Commission, the Energy Information Administration or the Rural Electrification Administration, ~~the owner owners, operator operators, or guarantor guarantors~~ shall obtain a special report by an independent certified public accountant

stating all of the following:

- a. The accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the latest year-end financial statements of ~~the owner owners, operator operators, or guarantor guarantors~~ with the amounts in such financial statements.
 - b. In connection with the comparison under subsection subparagraph (C)(5)(a), no matters came to the accountant's attention which caused the accountant to believe that the specified data should be adjusted.
- D. To demonstrate that it meets the financial test under subsection (B) or (C), the chief financial officer of ~~the owner owners, operator operators, or guarantor guarantors~~, shall sign, within 120 days of the close of each financial reporting year, as defined by the 12-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as provided in 40 CFR 280.95(d), except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.95(d), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
- E. If ~~an owner owners and operator operators~~, using a financial test of self-insurance for financial responsibility find that ~~he or she~~ they no longer ~~meets~~ meet the requirements of the financial test based on the year-end financial statements, ~~the owner owners and operator operators~~ shall obtain alternative coverage within 150 days of the end of the financial reporting year for which financial statements have been prepared.
- F. The Director may require reports of financial condition at any time from ~~the owner owners and operator operators, or guarantor guarantors~~. If the Director finds, on the basis of such reports or other information, that ~~the owner owners and operator operators, or guarantor guarantors~~, no longer ~~meet~~ meets the financial test requirements, ~~the owner owners and operator operators~~ shall obtain alternate coverage within 30 days after notification of such a finding.
- G. If ~~the owner owners and operator operators~~ fail to obtain alternate assurance within 150 days of finding that ~~he or she~~ they no longer ~~meet~~ meets the requirements of the financial test based on the year-end financial statements, or within 30 days of notification by the Director that ~~he or she~~ they no longer ~~meet~~ meets the requirements of the financial test, ~~the owner owners and operator operators~~ shall notify the Director of such failure within 10 days.
- H. ~~An owner Owners and operator operators~~ may use self-insurance in combination with a guarantee only if, for the purpose of meeting the requirements of the financial test under this Section, the financial statements of the owner or operator are not consolidated with the financial statements of the guarantor.

R18-12-306. Guarantee

- A. ~~An owner Owners and operator operators~~ may satisfy the requirements of R18-12-303 by obtaining a guarantee that conforms to the requirements. The guarantor shall be either 1 of the following:
1. A firm that meets any one of the following descriptions:
 - a. Possesses a controlling interest in the owner or operator,
 - b. Possesses a controlling interest in a firm described under subsection subparagraph (A)(1)(a),
 - c. Is controlled through stock ownership by a common parent firm that possesses a controlling interest in the owner or operator.
 2. A firm engaged in a substantial business relationship with the owner or operator and who issues the guarantee as an

Notices of Final Rulemaking

act incident to that business relationship.

- B. Within 120 days of the close of each financial reporting year, the guarantor shall demonstrate that it meets the financial test criteria of R18-12-305 based on year-end financial statements for the latest completed financial reporting year by completing the letter from the chief financial officer described in R18-12-305(D) and shall deliver the letter to the owner owners and operator operators. If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, within 120 days of the end of that financial reporting year the guarantor shall send by certified mail, before cancellation or nonrenewal of the guarantee, notice to the owner owners or operator operators. If the Director notifies the guarantor that the guarantor no longer meets the requirements of the financial test of R18-12-305(B) or (C) and (D), the guarantor shall notify the owner owners and operator operators within 10 days of receiving such notification from the Director. In both cases, the guarantee terminates no less than 120 days after the date the owner and operator receives the notification, as evidenced by the return receipt. The owner Owners and operator operators shall obtain alternate coverage as specified in R18-12-318 ~~320(C)~~.
- C. The guarantee shall be worded as provided in 40 CFR 280.96(c), except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.96(c), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
- D. An owner Owners and operators operator who use uses a guarantee to satisfy the requirements of R18-12-303 shall establish a standby trust fund when the guarantee is obtained. Under the terms of the guarantee, all amounts paid by the guarantor under the guarantee will be deposited directly into the standby trust fund in accordance with instructions from the Director under ~~R18-12-318~~ R18-12-322. This standby trust fund shall meet the requirements specified in R18-12-313.

R18-12-307. Insurance and Risk Retention Group Coverage

- A. An owner Owners and operator operators may satisfy the requirements of R18-12-303 by obtaining liability insurance that conforms to the requirements from a qualified insurer or risk retention group. Such insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.
- B. Each insurance policy shall be amended by an endorsement worded as specified in 40 CFR 280.97(b)(1) or evidenced by a certificate of insurance worded as specified in 40 CFR 280.97(b)(2), except that instructions in brackets shall be replaced with the relevant information and the brackets deleted. 40 CFR 280.97(b)(1) and (2) amended as of July 1, 1994 (and no future amendments or editions), are incorporated by reference and on file with the Department and the Office of the Secretary of State. Termination under 40 CFR 280.97(b)(1) and (2) as referenced in this Section means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.
- C. Each insurance policy shall be issued by an insurer or a risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in 1 one or more states.

R18-12-308. Surety Bond

- A. An owner Owners and operator operators may satisfy the requirements of R18-12-303 by obtaining a surety bond that

conforms to the requirements of this Section. The surety company issuing the bond shall be among those listed as acceptable sureties on federal bonds in the June 30, 1995 July 1, 1992, Circular 570 of the U.S. Department of the Treasury. Circular 570 of the U.S. Department of the Treasury, ~~as amended as of June 30, 1995 July 1, 1992~~, (and no future amendments or editions), is incorporated herein by reference and on file with the Department of Environmental Quality and the Office of the Secretary of State.

- B. The surety bond shall be worded as provided in 40 CFR 280.98(b), except that instructions in brackets shall be replaced with the relevant information and the brackets deleted. 40 CFR 280.98(b) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
- C. Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and annual aggregate penal sums.
- D. An owner Owners and operators operator who use uses a surety bond to satisfy the requirements of R18-12-303 shall establish a standby trust fund when the surety bond is acquired. Under the terms of the bond, all amounts paid by the surety under the bond shall be deposited directly into the standby trust fund in accordance with instructions from the Director under ~~R18-12-318~~ R18-12-322. This standby trust fund shall meet the requirements specified in R18-12-313.

R18-12-309. Letter of Credit

- A. An owner Owners and operator operators may satisfy the requirements of R18-12-303 by obtaining an irrevocable standby letter of credit that conforms to the requirements of this Section. The issuing institution shall be an entity that has the authority to issue letters of credit in this state and whose letter of credit operations are regulated and examined by a federal or state agency.
- B. The letter of credit shall be worded as provided in 40 CFR 280.99(b), except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.99(b) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
- C. An owner Owners and operators operator who use uses a letter of credit to satisfy the requirements of R18-12-303 shall also establish a standby trust fund when the letter of credit is acquired. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Director shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Director under ~~R18-12-318~~ R18-12-322. This standby trust fund shall meet the requirements specified in R18-12-313.
- D. The letter of credit shall be irrevocable with a term specified by the issuing institution. The letter of credit shall provide that credit be automatically renewed for the same term as the original term unless, at least 120 days before the current expiration date, the issuing institution notifies the owner or operator by certified mail of its decision not to renew the letter of credit. Under the terms of the letter of credit, the 120 days shall begin on the date when the owner or operator receives the notice, as evidenced by the return receipt.

R18-12-310. Certificate of Deposit

- A. Owners and operators may satisfy the corrective action requirements, but not the 3rd-party compensation require-

Notices of Final Rulemaking

ments, of R18-12-303 by obtaining an irrevocable certificate of deposit and preparing a Certification and Agreement that conforms to the requirements of this Section. The issuing institution shall meet all of the following:

1. Has the authority to issue certificates of deposit in Arizona.
2. Certificate of deposit operations are regulated and examined by a federal or state agency.
3. Is a member of the Federal Deposit Insurance Corporation.

B. The certificate of deposit may be used for the full required amount of corrective action coverage. Alternatively, it may be used for part of the required amount of corrective action coverage when used in combination with other mechanisms allowed under this Article which provide the remaining amount of coverage. In all cases, the full required amount of 3rd-party compensation coverage shall be met with another mechanism or mechanisms allowed under this Article.

C. Owners and operators who use a certificate of deposit to meet the corrective action requirements of R18-12-303 shall comply with all of the following:

1. The certificate of deposit document and the records of the issuing institution shall designate the Department as the sole payee. The original certificate of deposit, a blank signature card, and the certification and agreement executed in accordance with subsection (D) shall be submitted to the Department. The Department shall return the signa-

ture card to the issuing institution with the current Director's signature and the signature of an alternative person designated by the Director affixed;

2. If the issuing institution is unwilling or unable to prepare a certificate of deposit made payable only to the Department, the owner or operator and the issuing institution shall prepare and execute an assignment in the presence of a notary public with a copy provided to the issuing institution which allows only the Department access to the certificate of deposit;

3. The owner or operator's Social Security or Tax Identification number shall appear on the certificate of deposit;

4. All interest accrued on the certificate of deposit shall be applied back to the certificate of deposit;

5. Upon verification by the Department that the requirements of this Article are met using another mechanism or combination of mechanisms, the owner or operator may submit a written request to the Director for release of the certificate of deposit. Within 30 days of receipt of the request from the owner or operator under this subsection, the Director shall release to the owner or operator the certificate of deposit and the certification and agreement.

D. The owner or operator shall prepare, execute, and submit to the Department and the issuing institution a Certification and Agreement which shall be worded as follows except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Arizona Administrative Register

Notices of Final Rulemaking

CERTIFICATION AND AGREEMENT

CERTIFICATE OF DEPOSIT

[Name of owner or operator]

[Address of owner or operator]

a _____

[Insert "corporation," "partnership," "association," or "proprietorship"]

Hereby certifies that it has elected to use a Certificate of Deposit in accordance with R18-12-310 to cover all or part of its financial responsibility requirement for taking corrective action under Arizona Revised Statutes Title 49, Chapter 6, § 49-1006 as follows:

Section 1. This coverage is provided under Certificate of Deposit [Certificate of Deposit number] payable to the Department of Environmental Quality issued by [Name and address of issuing institution], [insert "Incorporated in the state of _____" or "a national bank"] for the period from [/ /19], through [/ /19] and is automatically renewable for a term of [Insert number of months] months in the amount of \$ _____. Both the Certificate of Deposit and the issuing institution meet the requirements of R18-12-310.

Section 2. The original of the Certificate of Deposit has been delivered to the Department of Environmental Quality, hereinafter known as the Department, to be held by the Department, along with this agreement, as proof of [Insert owner or operator's financial responsibility for taking corrective action caused by [Insert either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tanks(s) identified in Section 3 of this agreement. The amounts of financial assurance coverage provided by this Certificate of Deposit are:

[Insert the dollar amount of "each occurrence" and "annual aggregate" provided by the Certificate of Deposit; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location].

Section 3. The following underground storage tanks are covered by the Certificate of Deposit:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than 1 instrument is used to assure different tanks at any 1 facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to A.R.S. § 49-1002, and the name and address of the facility.]

Section 4. [Insert owner or operator] is held firmly unto the state of Arizona in the amount of those sums for those periods of time as set forth herein, until this Certification and Agreement is amended or renewed or released in accordance with R18-12-310. The Certificate of Deposit or any funds resulting from cashing of the Certificate of Deposit shall be maintained or disbursed only in accordance with the provisions of AAC R18-12-310.

Section 5. This Agreement shall remain in force during the term of the Certificate of Deposit and during any period of time prior to full expenditure or release of funds received from cashing of the Certificate of Deposit. [Insert owner or operator] shall notify the Department in writing immediately of any event which may impair this agreement. If the Department receives such notice, or otherwise has reason to believe that this agreement has been materially impaired, the Department may unilaterally amend the terms and conditions of this agreement to rectify any such impairment.

Section 6. The institution issuing the Certificate of Deposit is not a party to this agreement. Its obligations are set forth in its Certificate of Deposit. Nothing in this agreement diminishes or qualifies the issuing institution's obligations under its Certificate of Deposit.

The provisions hereof shall bind and inure to the benefit of the parties hereto and their successors and assigns.

Signed and dated this _____ day of _____, 19 _____

Date: _____

[Typed name of owner or operator]

BY: _____

Title

NOTARIZATION OF SIGNER'S ACKNOWLEDGEMENT

STATE _____)

_____) SS.

COUNTY OF _____)

The foregoing instrument was acknowledged before me this

_____ day of _____, 19____, by _____

as _____ of _____

NOTARY PUBLIC

My Commission Expires:

APPROVED:

STATE OF ARIZONA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Date _____ By: _____

Director, ADEQ

- E. The certificate of deposit shall be irrevocable with an automatically renewable term, the length of which may be specified by owners and operators. The initial term and the automatic renewal term shall be stated on the certificate of deposit.
- F. The Department may present for payment any certificate of deposit to the issuing institution and receive cash if either of the following occur:
1. The owner or operator reports a release in accordance with A.R.S. § 49-1004 from an underground storage tank covered by the certificate of deposit and makes a written request to the Director for payment of corrective action expenses required under A.R.S. § 49-1005. If a request for payment is made the owner or operator shall submit an invoice for corrective action services which have been performed as required under A.R.S. § 49-1005;
 2. The conditions of R18-12-322(B)(1) exist.
- G. The Department shall pay, from funds received from cashing the certificate of deposit, corrective action expenses if they are determined to be reasonable. Corrective action expenses shall be considered reasonable if they meet the criteria for reasonableness of cost under R18-12-605.
- H. The Director shall, within 30 days of the date on which the certificate of deposit is cashed, return to the owner or operator any funds received from cashing the certificate of deposit which are in excess of the amount of financial responsibility being demonstrated by the certificate of deposit. The Director shall place funds received from the certificate of deposit which have not been used to meet the expenses payable under subsection (G) in an UST Assurance Fund until such time as they are needed. If upon completion of all corrective action, as evidenced by a corrective action closure letter issued by the Department, the costs incurred are less than the amount received from cashing of the certificate of deposit, any excess funds remaining after final payment shall be refunded to the

owner or operator within 30 days of receipt by the Department of a written request for refund.

R18-12-311. State Fund or Other State Assurance

- A. Owners and operators may satisfy the requirements of R18-12-303 by obtaining coverage under an approved state fund which conforms to the requirements of this Section. The state fund shall be approved by a U.S. EPA Regional Administrator as a full or partial mechanism which may be used to meet the requirements of 40 CFR 280.93. 40 CFR 280.93 amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and on file with the Department and the Office of the Secretary of State. The state fund may be used to meet the requirements of this Article only as follows:
1. For facilities within this state which are eligible for coverage;
 2. For the amounts and types of coverage approved by the U.S. EPA Regional Administrator;
 3. Until such approval is withdrawn by the EPA Administrator and owners and operators are notified, in accordance with R18-12-319(A)(2), that the fund may no longer be used for compliance with financial responsibility requirements.
- B. Owners and operators shall submit to the Department, in accordance with R18-12-301(C), a copy of the form prescribed by the Department, completed by owners and operators which sets forth the nature of the state's assumption of responsibility. The form shall include, or have attached to it, the following information:
1. The owner or operator's name and address.
 2. The facility's name and address.
 3. The amount of funds for corrective action resulting from sudden accidental releases or non-sudden accidental releases or accidental releases which are assured by the state.

Notices of Final Rulemaking

4. If only certain tanks at a facility are assured by the state, those tanks which are assured by the state shall be identified by the tank identification number.

R18-12-312. Trust Fund

- A. ~~An owner~~ Owners and operator operators may satisfy the requirements of R18-12-303 by establishing a trust fund that conforms to the requirements of this Section. The trustee shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.
- B. The wording of the trust agreement shall be identical to the wording specified in 40 CFR 280.103(b)(1), and shall be accompanied by a formal certification of acknowledgment as specified in 40 CFR 280.103(b)(2). 40 CFR 280.103(b)(1) and (2), amended as of July 1, 1994 (and no future amendments or editions), are incorporated by reference and are on file with the Department and the Office of the Secretary of State.
- C. The trust fund, when established, shall be funded for the full required amount of coverage, or funded for part of the required amount of coverage and used in combination with other mechanisms that provide the remaining required coverage.
- D. If the value of the trust fund is greater than the required amount of coverage, the owner or operator may submit a written request to the Director for release of the excess.
- E. If other financial assurance as specified in the Sections R18-12-305 through R18-12-309 R18-12-311 and R18-12-312 R18-12-314 through R18-12-317 is substituted for all or part of the trust fund, the owner ~~and~~ or operator may submit a written request to the Director for release of the excess.
- F. Within 60 days after receiving a request from the owner ~~and~~ or operator for release of funds as specified in subsections (D) or (E) the Director shall instruct the trustee to release to the owner ~~and~~ or operator such funds as the Director specifies in writing.

R18-12-313. Standby Trust Fund

- A. ~~An owner~~ Owners and operator operators using any 1 one of the mechanisms authorized by R18-12-306, R18-12-308, and R18-12-309 shall establish a standby trust fund when the mechanism is acquired. The trustee of the standby trust fund shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.
- B. The standby trust agreement shall be worded as provided in 40 CFR 280.103(b) (1) and 40 CFR 280.103(b)(2), except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.
- C. The Director shall instruct the trustee to refund the balance of the standby trust fund to the provider of financial assurance if the Director determines that no additional corrective action costs or 3rd-party liability claims will occur as a result of a release covered by the financial assurance mechanism for which the standby trust fund was established.
- D. ~~An owner~~ Owners and operator operators may establish one 1 standby trust fund as the depository mechanism for all funds assured in compliance with this rule Article.

R18-12-314. Substitution of Financial Assurance Mechanisms by Owner or Operator Local Government Bond Rating Test

- A. ~~An owner and operator may substitute any alternate financial assurance mechanisms as specified in R18-12-305 through R18-12-309 and R18-12-312, if at all times the owner and operator maintains an effective financial assurance mechanism or combination of mechanisms that satisfies the requirements~~

~~of R18-12-303.~~

- ~~B. After obtaining alternate financial assurance as specified in R18-12-305 through R18-12-309 and R18-12-312, an owner and operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance.~~
- ~~C. Upon replacement of any financial mechanism, the owner and operator shall forward evidence of financial responsibility and certification of financial responsibility to the Director as required in R18-12-301(D).~~
- A. General purpose local government owners and operators or a local government serving as a guarantor that has the legal authority to issue general obligation bonds may satisfy the requirements of R18-12-303 by having a currently outstanding issue or issues of general obligation bonds of \$1 million or more, excluding refunded obligations, with a Moody's rating of Aaa, Aa, A, or Baa, or a Standard & Poor's rating of AAA, AA, A, or BBB. If a local government has multiple outstanding issues, or if a local government's bonds are rated by both Moody's and Standard and Poor's, the lowest rating shall be used to determine eligibility. Bonds that are backed by credit enhancement other than municipal bond insurance may not be considered in determining the amount of applicable bonds outstanding.
- B. Local government owners and operators or a local government serving as a guarantor that is not a general purpose local government and does not have the legal authority to issue general obligation bonds may satisfy the requirements of R18-12-303 by having a currently outstanding issue or issues of revenue bonds of \$1 million or more, excluding refunded issues and by also having a Moody's rating of Aaa, Aa, A, or Baa, or a Standard & Poor's rating of AAA, AA, A, or BBB as the lowest rating for any rated revenue bond issued by the local government. If bonds are rated by both Moody's and Standard & Poor's, the lower rating for each bond shall be used to determine eligibility. Bonds that are backed by credit enhancement may not be considered in determining the amount of applicable bonds outstanding.
- C. Local government owners and operators, or a guarantor, or both, shall maintain a copy of its bond rating published within the last 12 months by Moody's or Standard & Poor's.
- D. To demonstrate that it meets the local government bond rating test, the chief financial officer of a general purpose local government owner or operator, or the guarantor, or both, shall sign a letter worded exactly as provided in 40 CFR 280.104(d). Except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.104(d), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.
- E. To demonstrate that it meets the local government bond rating test, the chief financial officer of a local government owner and operator, or the guarantor, or both, shall sign a letter worded exactly as provided in 40 CFR 280.104(e), except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.104(e), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and on file with the Department and the Office of the Secretary of State.
- F. The Director may require reports of financial condition at any time from local government owners and operators, or the local government guarantor, or both. If the Director finds, on the basis of such reports or other information, that the local government owner or operator, or the guarantor, or both, no longer meets the local government bond rating test requirements of this Section, the local government owner or operator shall obtain alternative coverage within 30 days after notification of

Arizona Administrative Register
Notices of Final Rulemaking

such a finding.

- G.** If local government owners and operators using the bond rating test to provide financial assurance finds that it no longer meets the bond rating test requirements, the local government owner or operator shall obtain alternative coverage within 150 days of the change in status.

R18-12-315. Cancellation or Nonrenewal by a Provider of Financial Assurance Local Government Financial Test

- A.** Except as otherwise provided and subject to the following conditions, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator:

- 1.** Termination of a guarantee, a surety bond, or a letter of credit shall not occur until 120 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.
- 2.** Termination of insurance or risk retention group coverage, except for non-payment of premium or misrepresentation by the insured, may not occur until 60 days after the date on which the owner and operator receives the notice of termination, as evidenced by the return receipt. Termination for non-payment of premium or misrepresentation by the insured may not occur until a minimum of 10 days after the date on which the owner and operator receives the notice of termination, as evidenced by the return receipt.

- B.** If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider as specified in R18-12-316, the owner and operator shall obtain alternate coverage as specified in this Section within 60 days after receipt of the notice of termination. If the owner and operator fails to obtain alternate coverage within 60 days after receipt of the notice of termination, the owner and operator shall notify the Director of such failure and submit all of the following:

- 1.** The name and address of the provider of financial assurance.
- 2.** The effective date of termination.
- 3.** The evidence of the financial assurance mechanism subject to the termination submitted in accordance with R18-12-301.

- A.** Local government owners and operators may satisfy the requirements of R18-12-303 by passing the financial test specified in this Section. To be eligible to use the financial test, local government owners and operators shall have the ability and authority to assess and levy taxes or to freely establish fees and charges. To pass the local government financial test, owners and operators shall meet the criteria of subsections (B)(2) and (3) based on year-end financial statements for the latest completed fiscal year.

- B.** To pass the local government financial test, owners and operators shall meet all of the following:

- 1.** Local government owners and operators shall have the following information available, as shown in the year-end financial statements for the latest completed fiscal year:

- a.** Total revenues: consists of the sum of general fund operating and non-operating revenues including net local taxes, licenses and permits, fines and forfeitures, revenues from use of money and property, charges for services, investment earnings, sales such as property or publications, intergovernmental revenues whether or not restricted, and total revenues from all other governmental funds including enterprise, debt service, capital projects, and special revenues, but excluding revenues to funds held in a trust or agency capacity. For purposes of this test, the cal-

ulation of total revenues shall exclude all interfund transfers between funds under the direct control of the local government using the financial test, liquidation of investments, and issuance of debt;

- b.** Total expenditures: consists of the sum of general fund operating and non-operating expenditures including public safety, public utilities, transportation, public works, environmental protection, cultural and recreational, community development, revenue sharing, employee benefits and compensation, office management, planning and zoning, capital projects, interest payments on debt, payments for retirement of debt principal, and total expenditures from all other governmental funds including enterprise, debt service, capital projects, and special revenues. For purposes of this test, the calculation of total expenditures shall exclude all interfund transfers between funds under the direct control of the local government using the financial test;

- c.** Local revenues: consists of total revenues, as defined in subsection (B)(1)(a), minus the sum of all transfers from other governmental entities, including all monies received from federal, state, or local government sources;

- d.** Debt service: consists of the sum of all interest and principal payments on all long-term credit obligations and all interest-bearing short-term credit obligations. It includes interest and principal payments on general obligation bonds, revenue bonds, notes, mortgages, judgments, and interest bearing warrants. It excludes payments on non-interest-bearing short-term obligations, interfund obligations, amounts owed in a trust or agency capacity, and advances and contingent loans from other governments;

- e.** Total funds: consists of the sum of cash and investment securities from all funds, including general enterprise, debt service, capital projects, and special revenue funds, but excluding employee retirement funds, at the end of the local government's financial reporting year. It includes federal securities, federal agency securities, state and local government securities, and other securities such as bonds, notes, and mortgages. For purposes of this test, the calculation of total funds shall exclude agency funds, private trust funds, accounts receivable, value of real property, and other non-security assets.

- 2.** The local government's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion or a disclaimer of opinion. The local government cannot have outstanding issues of general obligation or revenue bonds that are rated as less than investment grade.

- 3.** Local government owners and operators shall have a letter signed by the chief financial officer worded as specified in subsection (C).

- C.** To demonstrate that it meets the financial test under subsection (B), the chief financial officer of the local government owner or operator shall sign, within 120 days of the close of each financial reporting year, as defined by the 12-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as provided in 40 CFR 280.105(c), except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR 280.105(c) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is

Notices of Final Rulemaking

on file with the Department and the Office of the Secretary of State.

- D.** If local government owners and operators using the test to provide financial assurance find that it no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator shall obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.
- E.** The Director may require reports of financial condition at any time from local government owners and operators. If the Director finds, on the basis of such reports or other information, that the local government owner or operator no longer meets the financial test requirements of subsections (B) and (C), the owner or operator shall obtain alternate coverage within 30 days after notification of such a finding.
- F.** If the local government owner or operator fails to obtain alternate assurance within 150 days of finding that it no longer meets the requirements of the financial test based on the year-end financial statements or within 30 days of notification by the Director that it no longer meets the requirements of the financial test, the owner or operator shall notify the Director of such failure within 10 days.

R18-12-316. Reporting by Owner or Operator Local Government Guarantee

- A.** In addition to meeting the requirements of R18-12-301, an owner and operator shall submit documented evidence of financial responsibility to the Director according to any 1 of the following applicable timeframes:
 - 1.** Within 30 days after the owner and operator identifies a release from an underground storage tank required to be reported under A.R.S. § 49-1004 and the rules promulgated thereunder.
 - 2.** If the owner and operator fails to obtain alternate coverage as required by R18-12-315(D), within 30 days after the owner or operator receives notice of any 1 of the following:
 - a.** Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor.
 - b.** Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism.
 - c.** Failure of a guarantor to meet the requirements of the financial test.
 - d.** Other incapacity of a provider of financial assurance.
 - 3.** As required by R18-12-305(G) and R18-12-315(B).
- B.** An owner and operator shall certify compliance with the financial responsibility requirements of this Article as specified in the new tank notification form when notifying the Department of the installation of a new underground storage tank under A.R.S. § 49-1002.F.
- C.** The Director may require an owner and operator to submit evidence of financial assurance or other information relevant to compliance with R18-12-301 through R18-12-321 at any time.
- A.** Local government owners and operators may satisfy the requirements of R18-12-303 by obtaining a guarantee that conforms to the requirements of this Section. The guarantor shall be either the state in which the local government owner or operator is located or a local government having a "substantial governmental relationship" with the owner or operator and issuing the guarantee as an act incident to that relationship. A local government acting as the guarantor shall meet the requirements of 1 of the following:
 - 1.** Demonstrate that it meets the bond rating test requirements of R18-12-314 and deliver a copy of the chief

financial officer's letter as contained in R18-12-314(D) or R18-12-314(E) to the local government owner or operator;

- 2.** Demonstrate that it meets the financial test requirements of R18-12-315 and deliver a copy of the chief financial officer's letter as contained in R18-12-315(C) to the local government owner or operator;
- 3.** Demonstrate that it meets the local government fund requirements of R18-12-317(A)(1), R18-12-317(A)(2) or R18-12-317(A)(3) and deliver a copy of the chief financial officer's letter as contained in R18-12-317(B) to the local government owner or operator.
- B.** If the local government guarantor is unable to demonstrate financial assurance under R18-12-314, R18-12-315, R18-12-317(A)(1), R18-12-317(A)(2) or R18-12-317(A)(3), at the end of the financial reporting year, the guarantor shall send by certified mail, before cancellation or non-renewal of the guarantee, notice to the owner or operator. The guarantee will terminate no less than 120 days after the date the owner or operator receives the notification, as evidenced by the return receipt. The owner or operator shall obtain alternative coverage as specified in R18-12-318.
- C.** The guarantee agreement shall be worded as specified in subsection (D) or (E), depending on which of the following alternative guarantee arrangements is selected:
 - 1.** If, in the default or incapacity of the owner or operator, the guarantor guarantees to fund a standby trust as directed by the Director, the guarantee shall be worded as specified in subsection (D);
 - 2.** If, in the default or incapacity of the owner or operator, the guarantor guarantees to make payments as directed by the Director for taking corrective action or compensating 3rd parties for bodily injury and property damage, the guarantee shall be worded as specified in subsection (E).
- D.** If the guarantor is a state, the "local government guarantee with standby trust made by a state" shall be worded exactly as provided in 40 CFR 280.106(d), except that instructions in brackets are to be replaced with relevant information and the brackets deleted. 40 CFR 280.106(d) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State. If the guarantor is a local government, the "local government guarantee with standby trust made by a local government" shall be worded exactly as provided in 40 CFR 280.106(d), except that instructions in brackets are to be replaced with relevant information and the brackets deleted.
- E.** If the guarantor is a state, the "local government guarantee without standby trust made by a state" shall be worded exactly as provided in 40 CFR 280.106(e), except that instructions in brackets are to be replaced with relevant information and the brackets deleted. 40 CFR 280.106(e) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and on file with the Department and the Office of the Secretary of State. If the guarantor is a local government, the "local government guarantee without standby trust made by a local government" shall be worded exactly as provided in 40 CFR 280.106(e), except that instructions in brackets are to be replaced with relevant information and the brackets deleted.

R18-12-317. Local Government Fund

- A.** Local government owners and operators may satisfy the requirements of R18-12-303 by establishing a dedicated fund account that conforms to the requirements of this Section. Except as specified in subsection (A)(2), a dedicated fund may not be commingled with other funds or otherwise used in normal operations. A dedicated fund shall be considered eligible

Arizona Administrative Register
Notices of Final Rulemaking

if it meets 1 of the following requirements:

1. The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance, or order to pay for taking corrective action and for compensating 3rd parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks and is funded for the full amount of coverage required under R18-12-303, or funded for part of the required amount of coverage and used in combination with other mechanisms that provide the remaining coverage;
2. The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance, or order as a contingency fund for general emergencies, including taking corrective action and compensating 3rd parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks, and is funded for 5 times the full amount of coverage required under R18-12-303, or funded for part of the required amount of coverage and used in combination with other mechanisms that provide the remaining coverage. If the fund is funded for less than 5 times the amount of coverage required under R18-12-303, the amount of financial responsibility demonstrated by the fund may not exceed 1/5 the amount in the fund;
3. The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance or order to pay for taking corrective action and for compensating 3rd parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks. A payment is made to the fund once every year for 7 years until the fund is fully-funded. This 7-year period is referred to as the "pay-in-period." The amount of each payment shall be determined by the following formula:

$$\frac{TF - CF}{Y}$$

where TF is the total required financial assurance for the owner or operator, CF is the current amount in the fund, and Y is the number of years remaining in the pay-in-period, and 1 of the following is met:

- a. The local government owner or operator has available bonding authority, approved through voter referendum, if such approval is necessary prior to the issuance of bonds, for an amount equal to the difference between the required amount of coverage and the amount held in the dedicated fund. This bonding authority shall be available for taking corrective action and for compensating 3rd parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks;
 - b. The local government owner or operator has a letter signed by the state attorney general stating that the use of the bonding authority will not increase the local government's debt beyond the legal debt ceilings established by the relevant state laws. The letter shall also state that prior voter approval is not necessary before use of the bonding authority.
- B.** To demonstrate that it meets the requirements of the local government fund, the chief financial officer of the local government owner or operator, or guarantor, or both, shall sign a letter worded exactly as provided in 40 CFR 280.107(d), except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted. 40 CFR

280.107(d) amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State.

R18-12-318. Drawing on Financial Assurance Mechanisms Substitution of Financial Assurance Mechanisms by Owner and Operator

- A.** The Director shall require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the Director, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if either of the following circumstances exist:
1. Occurrence of both of the following circumstances:
 - a. The owner or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism.
 - b. The Director determines or has reason to believe that a release from an underground storage tank covered by the mechanism has occurred and so notifies the owner or operator, or the owner and operator has notified the Director pursuant to A.R.S. § 49-1004 and the rules promulgated thereunder of a release from an underground storage tank covered by the mechanism.
 2. The conditions of subsections (B)(1), (2), or (3) are satisfied.
- B.** The Director may draw on a standby trust fund when any of the following occurs:
1. The Director makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and the owner and operator, after appropriate notice and opportunity to comply, has not conducted corrective action as required under A.R.S. § 49-1005 and the rules promulgated thereunder.
 2. The Director receives a certification from the owner and operator and the 3rd party liability claimant(s) and from attorneys representing the owner and operator and the 3rd party liability claimant(s) that a 3rd party liability claim should be paid. The certification shall be worded as provided in 40 CFR 280.108(b)(2)(i), except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.108(b)(2)(i), as amended as of July 1, 1991 (and no future editions), is incorporated herein by reference and is on file with the Department of Environmental Quality and the Office of the Secretary of State.
 3. The Director receives a valid final court order establishing a judgment against the owner or operator for bodily injury or property damage caused by an accidental release from an underground storage tank covered by financial assurance under this Article and the Director determines that the owner or operator has not satisfied the judgment.
- C.** If the Director determines that the amount of corrective action costs and 3rd party liability claims eligible for payment under subsection (B) may exceed the balance of the standby trust fund and the obligation of the provider of financial assurance, the 1st priority for payment shall be corrective action costs necessary to protect human health and the environment. The Director shall pay 3rd party liability claims in the order in which the Director receives certifications under subsection (B)(2) and valid court orders under subsection (B)(3).
- A.** Owners and operators may substitute any alternate financial assurance mechanisms as specified in R18-12-305 through R18-12-312 and R18-12-314 through R18-12-317, if at all times owners and operators maintain an effective financial

Arizona Administrative Register
Notices of Final Rulemaking

assurance mechanism or combination of mechanisms that satisfies the requirements of R18-12-303.

- B.** After obtaining alternate financial assurance as specified in R18-12-305 through R18-12-312 and R18-12-314 through R18-12-317, an owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance.
- C.** Upon replacement of any financial assurance mechanism, the owner or operator shall forward evidence of financial responsibility and certification of financial responsibility to the Department as required in R18-12-301(C).

R18-12-319. Release from Financial Responsibility Requirements Cancellation or Nonrenewal by a Provider of Financial Assurance

An owner and operator is no longer required to maintain financial responsibility under this Article for an underground storage tank after the tank has been properly closed or, if corrective action is required, after corrective action has been completed and the tank has been properly closed as required by A.R.S. § 49-1008 and the rules promulgated thereunder.

- A.** Except as otherwise provided, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator in accordance with 1 of the following:
1. Termination of a local government guarantee, guarantee, surety bond, or letter of credit shall not occur until 120 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt;
 2. Termination of insurance or risk retention group coverage, or state-funded assurance, except for non-payment of premium or misrepresentation by the insured, shall not occur until 60 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt. Termination for non-payment of premium or misrepresentation by the insured shall not occur until a minimum of 10 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.
- B.** If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider as specified in R18-12-324, owners and operators shall obtain alternate coverage as specified in this Article within 60 days after receipt of the notice of termination. If owners and operators fails to obtain alternate coverage within 60 days after receipt of the notice of termination, owners and operators shall notify the Director of such failure and submit all of the following:
1. The name and address of the provider of financial assurance;
 2. The effective date of termination;
 3. The evidence of the financial assurance mechanism subject to the termination submitted in accordance with R18-12-301.

R18-12-320. Bankruptcy or other incapacity of owner, operator, or provider of financial assurance Reporting by Owner and Operator

- A.** Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming an owner or operator as debtor, the owner and operator shall notify the Director by certified mail of such commencement and submit the appropriate forms listed in R18-12-301 documenting current financial responsibility.
- B.** Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code,

naming a guarantor providing financial assurance as debtor, such guarantor shall notify the owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in R18-12-306.

- C.** An owner and operator who obtains financial assurance by a mechanism other than the financial test of self-insurance will be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, or letter of credit. The owner and operator shall obtain alternate financial assurance as specified in this Article within 30 days after receiving notice of such an event. If the owner and operator does not obtain alternate coverage within 30 days after such notification, the owner and operator shall notify the Director.
- A.** Owners and operators shall submit documented evidence of financial responsibility as described under R18-12-301(C) to the Director according to any of the following:
1. Within 30 days after owners and operators identify a release from an underground storage tank required to be reported under A.R.S. § 49-1004 and the rules promulgated thereunder.
 2. If owners and operators fail to obtain alternate coverage as required by R18-12-319(B), within 30 days after the owner or operator receives notice of any 1 of the following:
 - a. Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor;
 - b. Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism;
 - c. Failure of a guarantor to meet the requirements of the financial test;
 - d. Other incapacity of a provider of financial assurance.
 3. As required by R18-12-305(G) and R18-12-319(B).
- B.** Owners and operators shall include in the initial or updated Notification Form a certification of compliance with the financial responsibility requirements of this Article.
- C.** The Director may, at any time, require owners and operators to submit evidence of financial assurance or other information relevant to compliance with R18-12-301 through R18-12-325.

R18-12-321. Replenishment of Guarantees, Letters of Credit, or Surety Bonds

- A.** If at any time after a standby trust is funded upon the instruction of the Director with funds drawn from a guarantee, letter of credit, or surety bond, and the amount in the standby trust is reduced below the full amount of coverage required, the owner and operator shall by the anniversary date of the financial mechanism from which the funds were drawn do either of the following:
1. Replenish the value of financial assurance to equal the full amount of coverage required;
 2. Acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.
- B.** For purposes of this Section, the full amount of coverage required is the amount of coverage to be provided under R18-12-303. If a combination of mechanisms was used to provide the assurance funds which were drawn upon, replenishment shall occur by the earliest anniversary date among the mechanisms.

Arizona Administrative Register
Notices of Final Rulemaking

R18-12-322. Drawing on Financial Assurance Mechanisms

A. Except as provided in subsection (D), the Director shall require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the Director, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if either of the following circumstances exist:

- 1.** Occurrence of both of the following circumstances:
 - a.** The owner or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism;
 - b.** The Director determines or has reason to believe that a release from an underground storage tank covered by the financial assurance mechanism has occurred and so notifies the owner or operator, or owners and operators notify the Director pursuant to A.R.S. § 49-1004 and the rules promulgated thereunder of a release from an underground storage tank covered by the financial assurance mechanism.
- 2.** The conditions of subsections (B)(1), (2), or (3) are satisfied.

B. The Director may draw on a certificate of deposit or standby trust fund when any of the following occurs:

- 1.** The Director makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and owners and operators, after appropriate notice and opportunity to comply, have not conducted corrective action as required under A.R.S. § 49-1005 and the rules promulgated thereunder;
- 2.** The Director receives a certification from the owner or operator and the 3rd-party liability claimant and from attorneys representing the owner or operator and the 3rd-party liability claimant that a 3rd-party liability claim should be paid. The certification shall be worded as provided in 40 CFR 280.112(b)(2)(i), except that instructions in brackets are to be replaced with the relevant information and the brackets deleted. 40 CFR 280.112(b)(2)(i), amended as of July 1, 1994 (and no future amendments or editions), is incorporated by reference and is on file with the Department and the Office of the Secretary of State;
- 3.** The Director receives a valid final court order establishing a judgment against the owner or operator for bodily injury or property damage caused by an accidental release from an underground storage tank covered by financial assurance under this Article and the Director determines that the owner or operator has not satisfied the judgment.

C. If the Director determines that the amount of corrective action costs and 3rd-party liability claims eligible for payment under subsection (B) may exceed the balance of the certificate of deposit or standby trust fund and the obligation of the provider of financial assurance, the 1st priority for payment shall be corrective action costs necessary to protect human health and the environment. The Director shall pay 3rd-party liability claims in the order in which the Director receives certifications under subsection (B)(2) and valid court orders under subsection (B)(3).

D. A governmental entity acting as guarantor under R18-12-316(E), the local government guarantee without standby trust, shall make payments as directed by the Director under the circumstances described in subsections (A), (B), and (C).

R18-12-323. Release from Financial Responsibility Requirements

Owners and operators are no longer required to maintain financial responsibility under this Article for an underground storage tank

after the tank has completed permanent closure or change-in-service in accordance with the requirements of A.R.S. § 49-1008 and the rules promulgated thereunder or, if corrective action is required, after corrective action has been completed and the tank has completed permanent closure or change-in-service under A.R.S. § 49-1008 and the rules promulgated thereunder.

R18-12-324. Bankruptcy or Other Incapacity of Owner, Operator, or Provider of Financial Assurance

A. Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming an owner or operator as debtor, owners and operators shall notify the Director by certified mail of such commencement and submit the appropriate forms listed in R18-12-301 documenting current financial responsibility.

B. Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial assurance as debtor, such guarantor shall notify the owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in R18-12-306.

C. Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a local government owner or operator as debtor, the local government owner or operator shall notify the Director by certified mail of such commencement and submit the appropriate forms listed in R18-12-301 documenting current financial responsibility.

D. Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing a local government financial assurance as debtor, such guarantor shall notify the local government owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in R18-12-316.

E. Owners and operators who obtain financial assurance by a mechanism other than the financial test of self-insurance will be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, letter of credit, or certificate of deposit. Owners and operators shall obtain alternate financial assurance as specified in this Article within 30 days after receiving notice of such an event. If owners and operators do not obtain alternate coverage within 30 days after such notification, owners and operators shall notify the Director.

F. Within 30 days after receipt of notification that a state fund or other state assurance has become incapable of paying for assured corrective action costs or 3rd-party liability compensation, owners and operators shall obtain alternate financial assurance.

R18-12-325. Replenishment of Guarantees, Letters of Credit, or Surety Bonds

A. If a standby trust is funded upon the instruction of the Director with funds drawn from a guarantee, local government guarantee with standby trust, letter of credit, or surety bond, and if the amount in the standby trust is reduced below the full amount of coverage required, owners and operators shall by the anniversary date of the financial mechanism from which the funds were drawn do either of the following:

- 1.** Replenish the value of financial assurance to equal the full amount of coverage required;
- 2.** Acquire another financial assurance mechanism for the amount by which funds in the standby trust have been

Arizona Administrative Register
Notices of Final Rulemaking

- reduced.
- B.** For purposes of this Section, the full amount of coverage required is the amount of coverage to be provided under R18-12-303. If a combination of mechanisms was used to provide the assurance funds which were drawn upon, replenishment shall occur by the earliest anniversary date among the mechanisms.

ARTICLE 4. UNDERGROUND STORAGE TANK EXCISE TAX

R18-12-401. Definitions

In addition to the definitions prescribed in A.R.S. § 49-1001, the terms of this Article shall have the following meanings:-

1. "Aviation fuel" has the meaning ascribed to it in A.R.S. § 28-101(4).
2. "Department" means the Department of Environmental Quality.
3. "Diesel" has the meaning ascribed to it in A.R.S. § 28-1599.45(B).
4. "Facility identification number" means the unique number assigned to a storage facility either after the notification requirements of A.R.S. § 49-1002 are satisfied, or after a refund claim is submitted and approved pursuant to R18-12-409.
5. "Facility location" means the street address or if no street address is assigned, other description sufficient to identify the physical location of the storage facility.
6. "Facility name" means the business or operational name associated with a storage facility.
7. "Indian country" means all of the following:
 - a. All land within the limits of an Indian reservation under the jurisdiction of the United States government which is also located within the borders of this state, notwithstanding the issuance of any patent, and including rights of way running through the reservation.
 - b. All dependent Indian communities within the borders of the state whether within the original or subsequently acquired territory thereof.
 - c. All Indian allotments, the Indian titles to which have not been extinguished, including rights of way running through such allotments.
8. "Motor vehicle fuel" has the meaning ascribed to it in A.R.S. § 28-101(34).
9. "Owner identification number" means the unique number assigned to the owner of an underground storage tank by the Department after the notification requirements of A.R.S. § 49-1002 are satisfied, or after a refund claim is submitted and approved pursuant to R18-12-409.
10. "Storage facility" means the common, identifiable, location at which deliveries of regulated substances are made to an underground storage tank, an aboveground storage tank, or to a group of underground or aboveground storage tanks, and to which the Department has assigned a single facility identification number.
11. "Supplier" means, for purposes of collection of the UST excise tax, a person who is described by either A.R.S. § 28-1599.45(A) or (B). The term "supplier" includes a distributor, as defined by A.R.S. § 28-101(18) who is required to be licensed by A.R.S. Title 28, Chapter 9, Article 1.
12. "Supplier identification number" means the unique number assigned to the supplier by the Department of Transportation for the purpose of administering the motor vehicle fuel tax under A.R.S. Title 28, Chapter 9, Article 1.
13. "Tax" means the excise tax imposed on the operation of underground storage tanks pursuant to A.R.S. Title 49, Chapter 6, Article 2.
14. "Taxpayer" means the owner or the operator of an underground storage tank who pays the tax.